A3355-1

ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

MUNICIPAL WASTEWATER TREATMENT FACILITY FINANCIAL SURVEY 1987

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PREFACE

What user charges are the major wastewater treatment facilities assessing their customers? What percentage of their funds are allocated to operations and maintenance? What level of outstanding debt services do publicly-owned treatment works have?

These and other questions were answered by over two-thirds of the membership of the Association of Metropolitan Sewerage Agencies (AMSA) in a survey conducted in 1986 by AMSA's Facilities Financing Committee. This publication contains the results of this survey. To make the resulting numbers more meaningful, extensive background information and general financial data were also collected and comprise a major portion of this report.

The survey updates and expands upon three previous surveys, performed in 1981, 1982 and 1983. While the data should prove extremely useful for comparative purposes, and as an indicator of trends in rates, readers are cautioned that it should not be construed as a definitive study of, or guide to the setting of, rates for a large municipal agency. The information contained in this report is accurate, as reported by AMSA member agencies. AMSA, however, cannot accept responsibility for individual agency responses.

The report is presented in two sections: an Analysis of Survey Responses, including descriptive material, graphs and charts; and a compilation of Computer Data providing survey responses.

Special thanks are due to the Milwaukee Metropolitan Sewerage District, and in particular to Patrick Marchese, Executive Director, for the oversight of this project and the contribution of many hours of his own time and that of his staff; to Ronald Anderson, Manager, Collection System Tecnical Support, for the analysis of the data; and to Steven Bassett, Senior Systems Analyst, for the graphics and tabulations.

1987 AMSA
MUNICIPAL WASTEWATER
TREATMENT FACILITY
FINANCIAL SURVEY

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ANALYSES OF SURVEY RESPONSES

SECTION A - GENERAL

SECTION A — GENERAL

1.&2. *Number of Agencies Participating*

This year's survey had 80 participants. Most questions were answered by 75 to 80 agencies, with at least 64 agencies answering all questions. This analysis summarizes the results shown on the computer tabulations of responses to survey questions which follow. Also, supporting bar graphs are designed to show the array of responses over the range of each given value parameter, by charting the number of responses over the various increments of the range, i.e. those with 0 to $10 million dollar budgets, $10 to $20 million, etc. The median of all responses is also listed on each graph.

3. *Residential Population Served*

The largest agency reported serving a population of 5,100,000, the smallest 35,000. 75 of the 80 agencies served less than 2,000,000, and the median population size is 500,000. Also see Graph A-1.

4. *Number of Sewer Connections*

67 agencies responded to this question. The largest agency reported serving 2,900,000 connections, the smallest 18,000. The median is 125,000 connections. Also see Graph A-2.

5. *Retailers and Wholesalers*

Responses to the survey are summarized as follows:

Type Reported	**Number of Agencies**
Retailers	19
Wholesalers	16
Both Retail & Wholesalers	32

6. *Average 1985 Flow in MGD*

The largest agency reported treating 1,358 MGD, the smallest 9 MGD. The median among 77 agencies is 72 MGD. Also see Graph A-3.

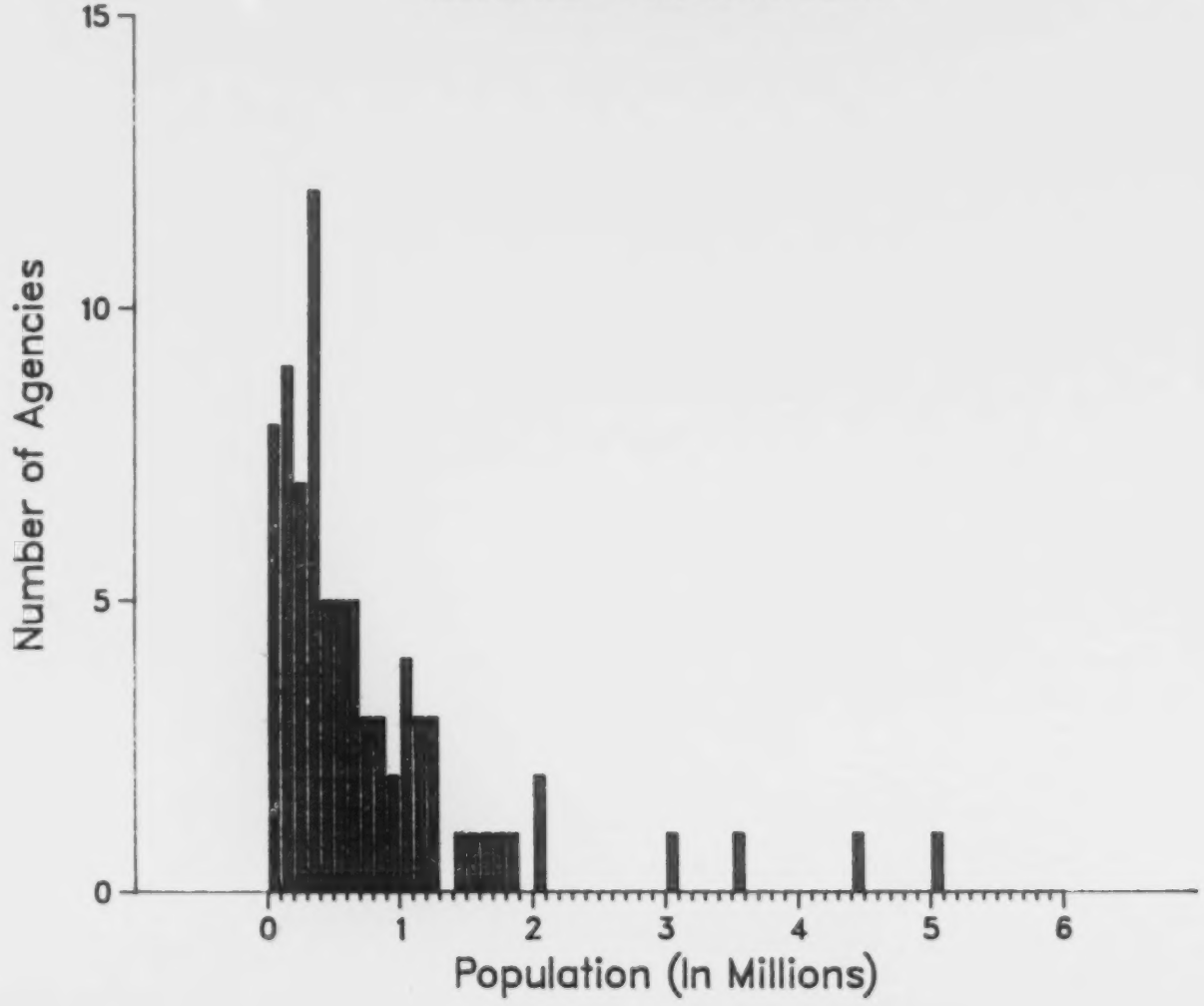
7. *Size of Service Area*

The largest service area reported was 9,180 sq. miles. The second largest was 2,000 sq. miles. 80% of the 72 agencies reporting had service areas within a range of 18 to 500 sq. miles. The median size was 237 sq. miles. Also see Graph A-4 titled "Geographic Area of Agencies."

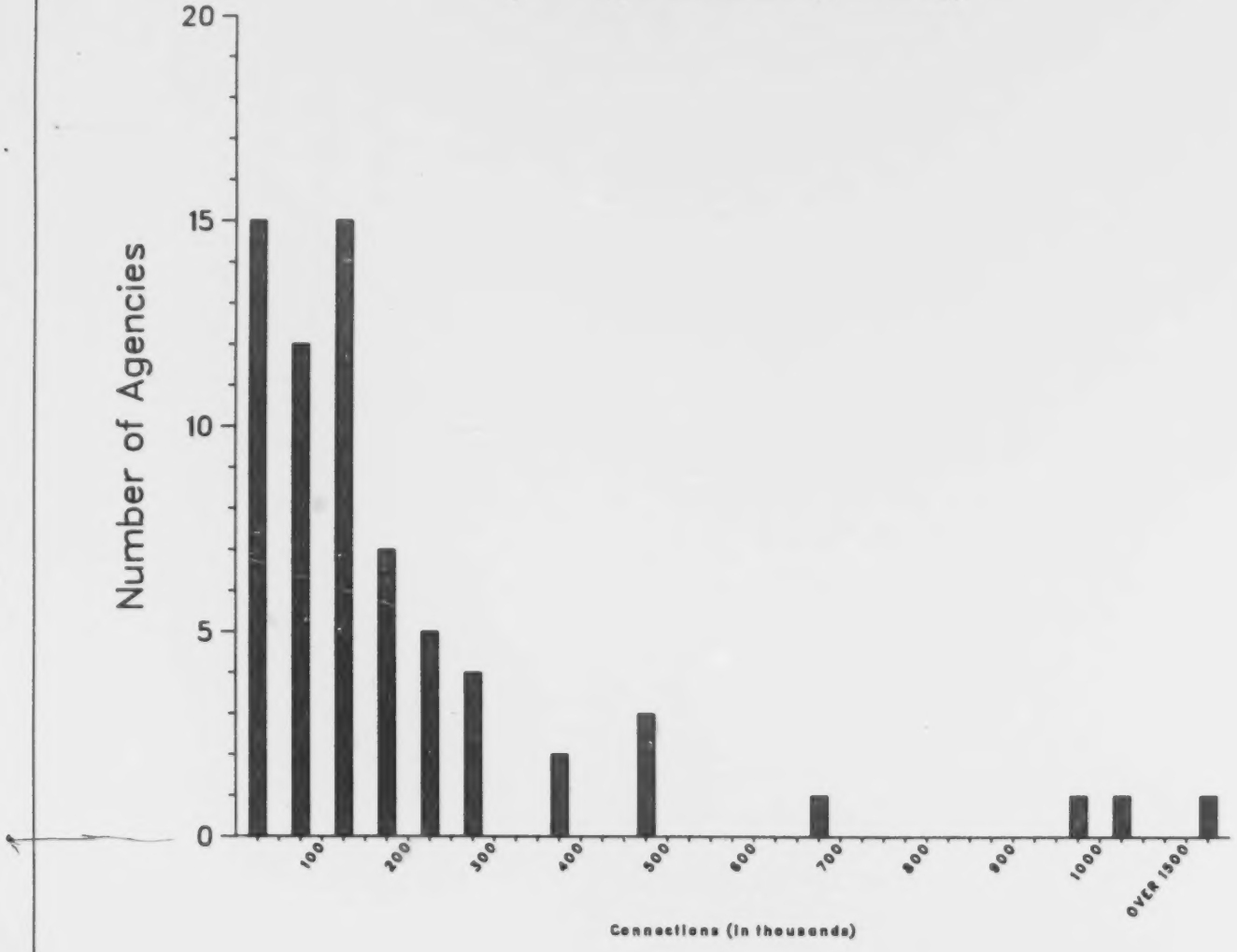
8. *Size of Staff*

The largest staff reported was 2,344 employees, the smallest 8. The median staff size among 79 agencies reporting was 300 employees. Also see Graph A-5.

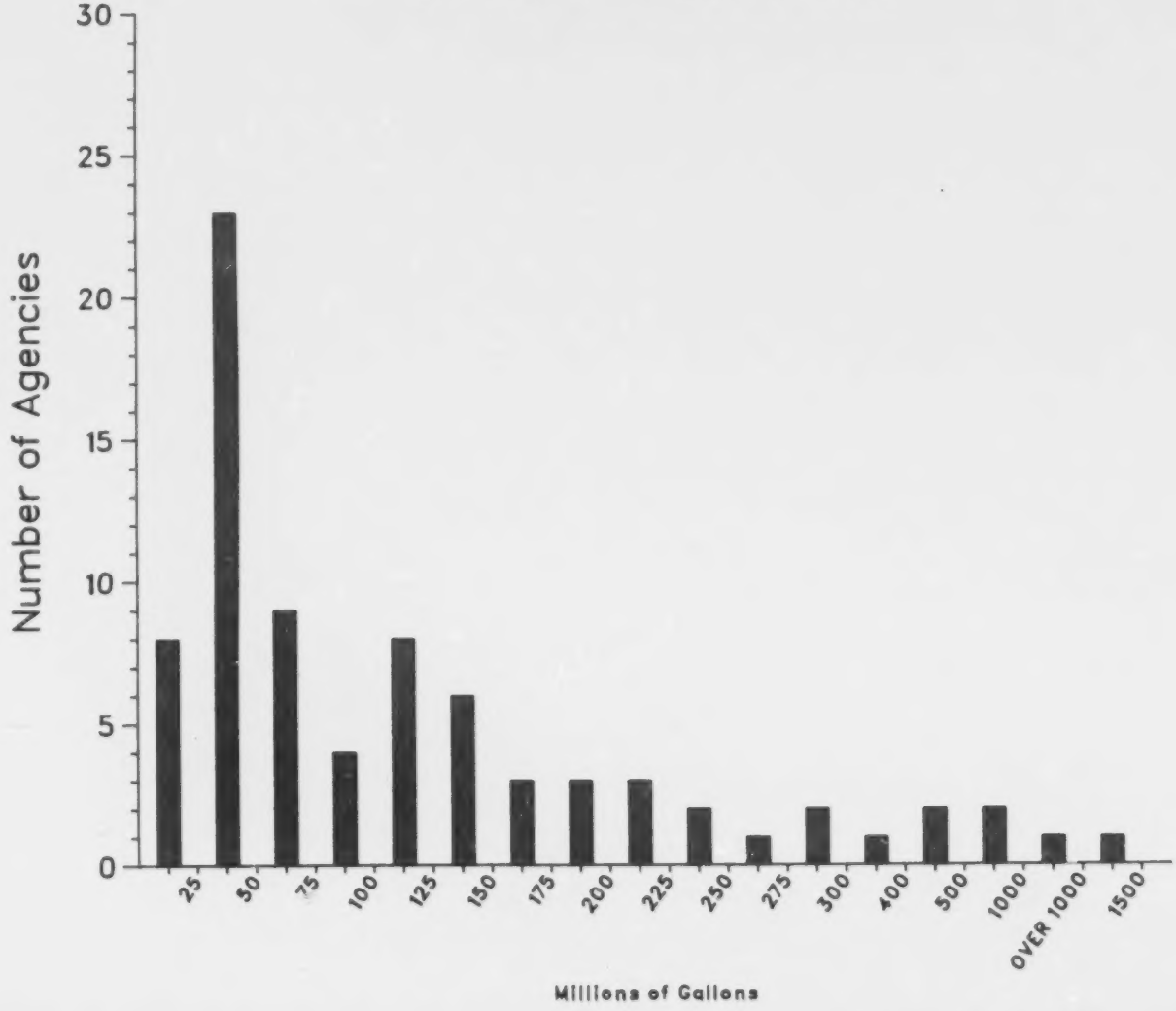
NUMBER OF AGENCIES
RESPONDING TO QUESTIONAIRE
IN EACH POPULATION CATEGORY
(80 AGENCIES REPORTING)
MEDIAN SIZE = 500,000 POPULATION



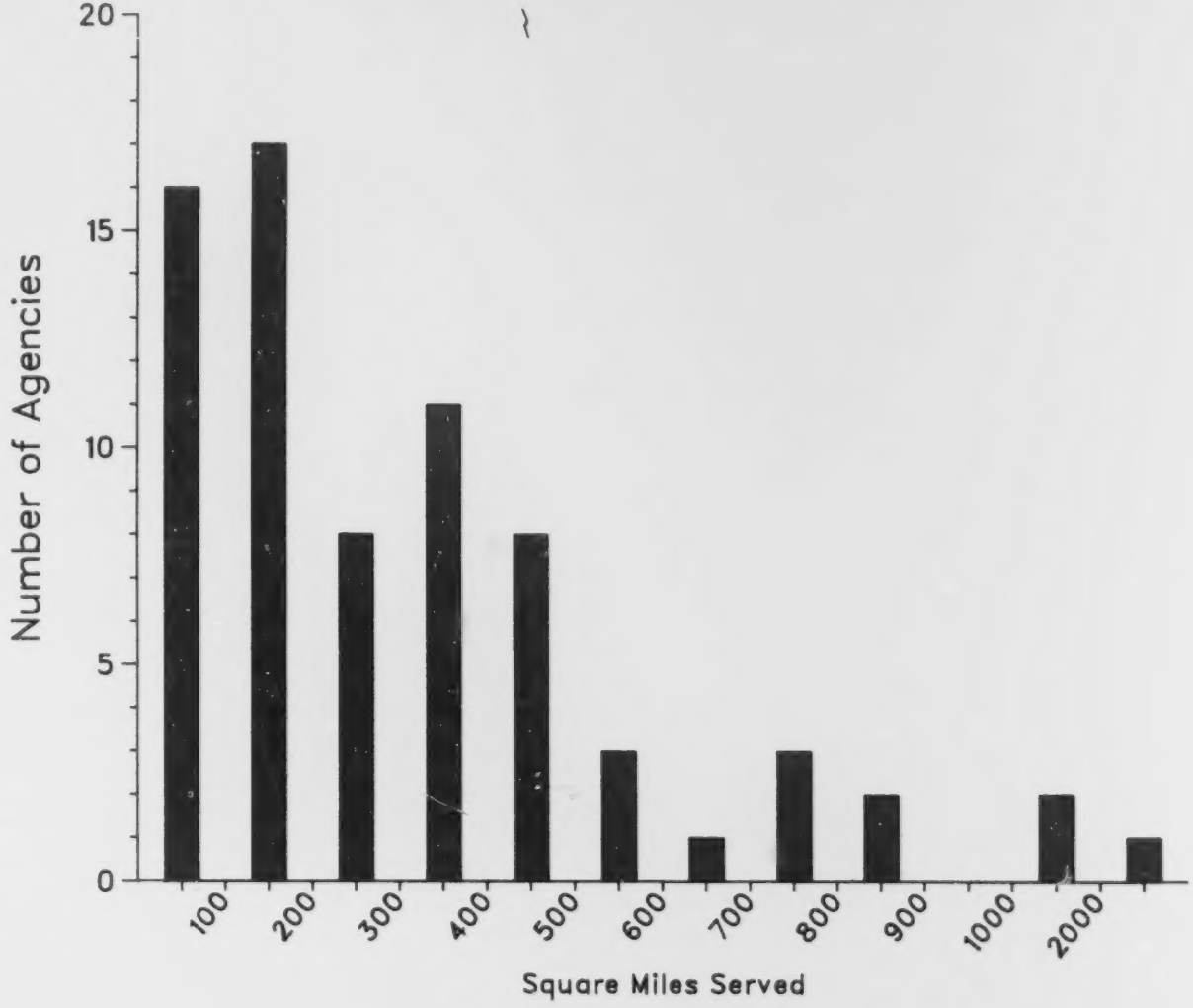
NUMBER OF SEWER CONNECTIONS
Median = 125,000
(67 Agencies Reporting)



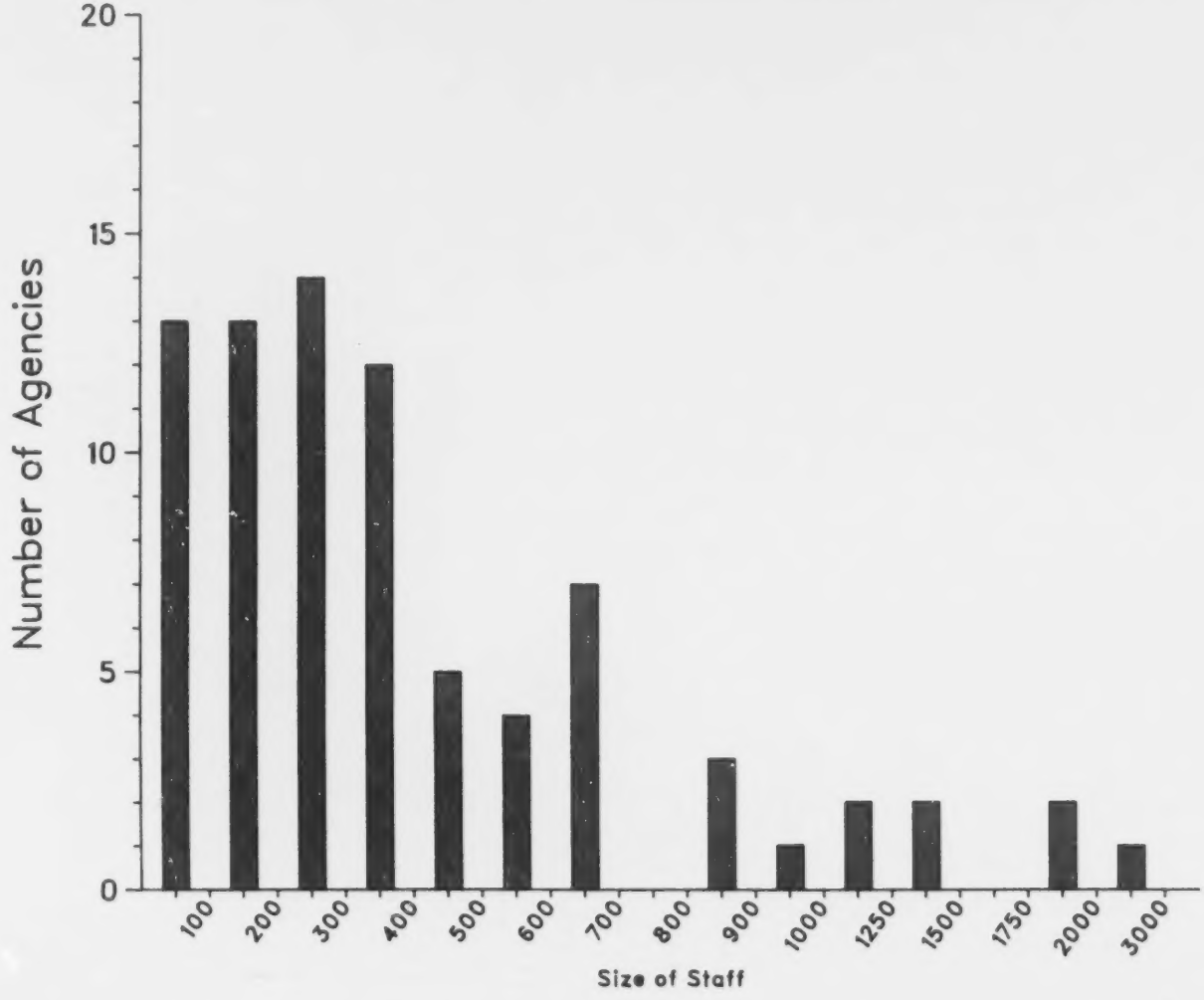
AVERAGE DAILY FLOW
Median 72 MGD
(77 Agencies Reporting)



GEOGRAPHIC AREA OF AGENCIES
Median 237 Square Miles



SIZE OF STAFF
Median = 300 Employees



9. *Present Level of Services*

The following table lists the number of agencies presently providing the level of service indicated:

Level of Service Provided	No. of Agencies	% of Total Agencies
Treatment only	8	10%
Interceptor and Treatment	29	36%
Collection and Treatment	33	41%
Storm, Collection & Treatment	10	13%
TOTAL	80	100%

10. *System-Wide Level of Treatment*

338 treatment plants were represented among the 78 agencies reporting. For a breakdown by level of treatment, see Pie Chart A-6 titled "Kinds of Plants."

11. *Wastewater Sources*

The percentage share of total plant influent attributable to Residences, Infiltration/Inflow and Commercial/Industrial waste discharges varied considerably among the agencies. A summary of responses is as follows:

Wastewater Source	Median	Range
Commercial/Industrial	25%	5% to 65%
Residential	55%	25% to 95%
Infiltration/Inflow	20%	0% to 55%

Also see Graph A-7 for more detail.

12. *Sewage Strengths*

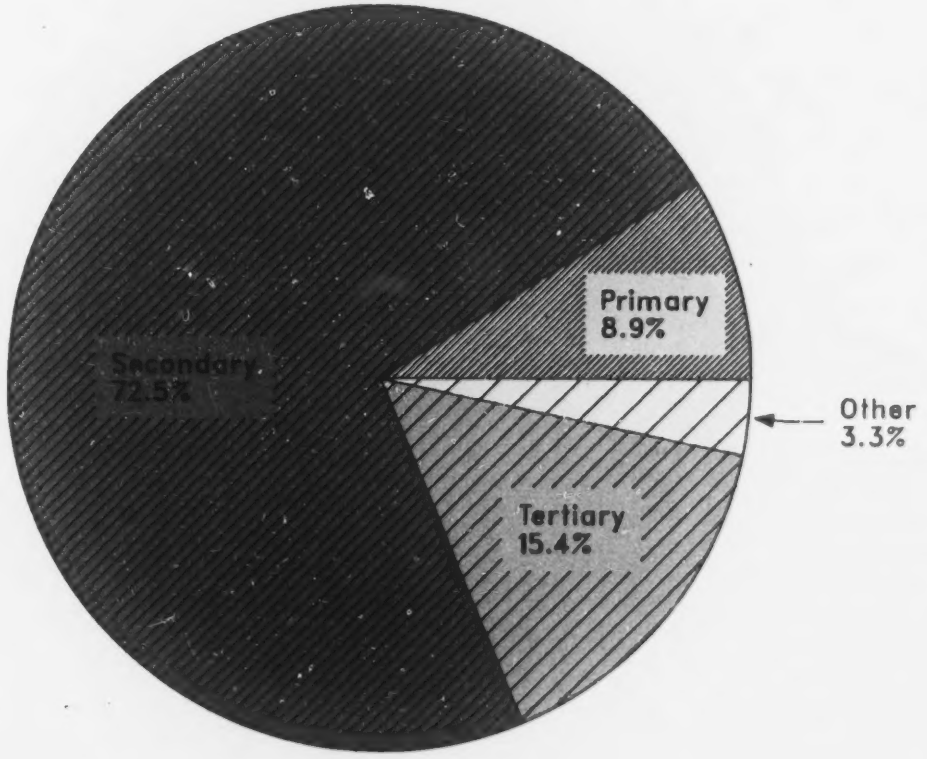
Respondents were asked to list the assumed strength of customer wastewaters, as well as strength of total plant influent, including I/I. Of the 80 agencies surveyed, 33 responded to both questions (8 of these listed the same strength for both).

An additional 19 listed only strength of customer wastewaters, for a total of 52 responses on the latter. They ranged as follows:

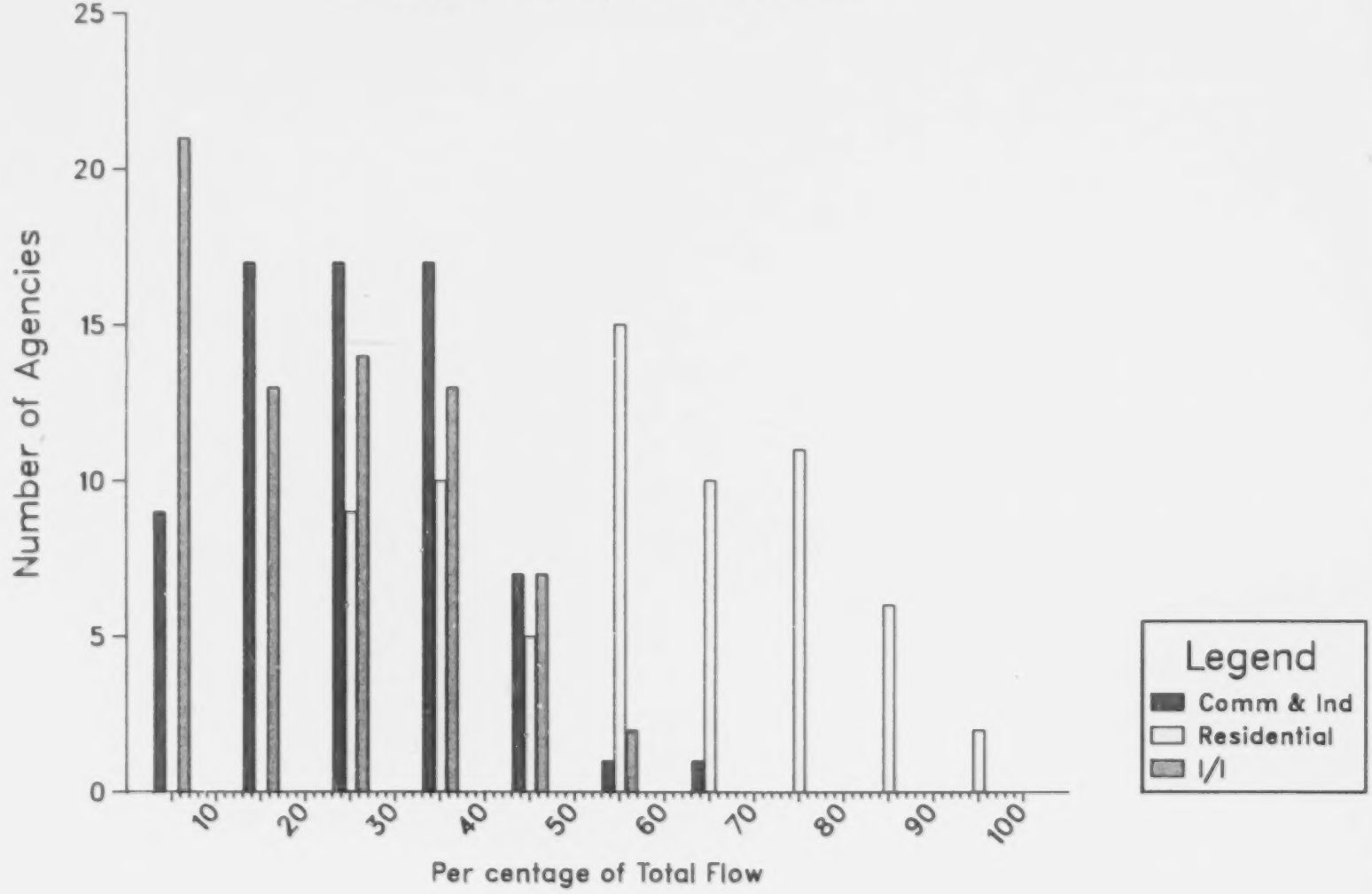
Assumed Customer Wastewater Strength	BOD	TSS
Minimum	120 mg/l	140 mg/l
Median	220 mg/l	230 mg/l
Average	240 mg/l	247 mg/l
Maximum	514 mg/l	400 mg/l

For a more detailed breakdown on the above, see Graph A-8-a.

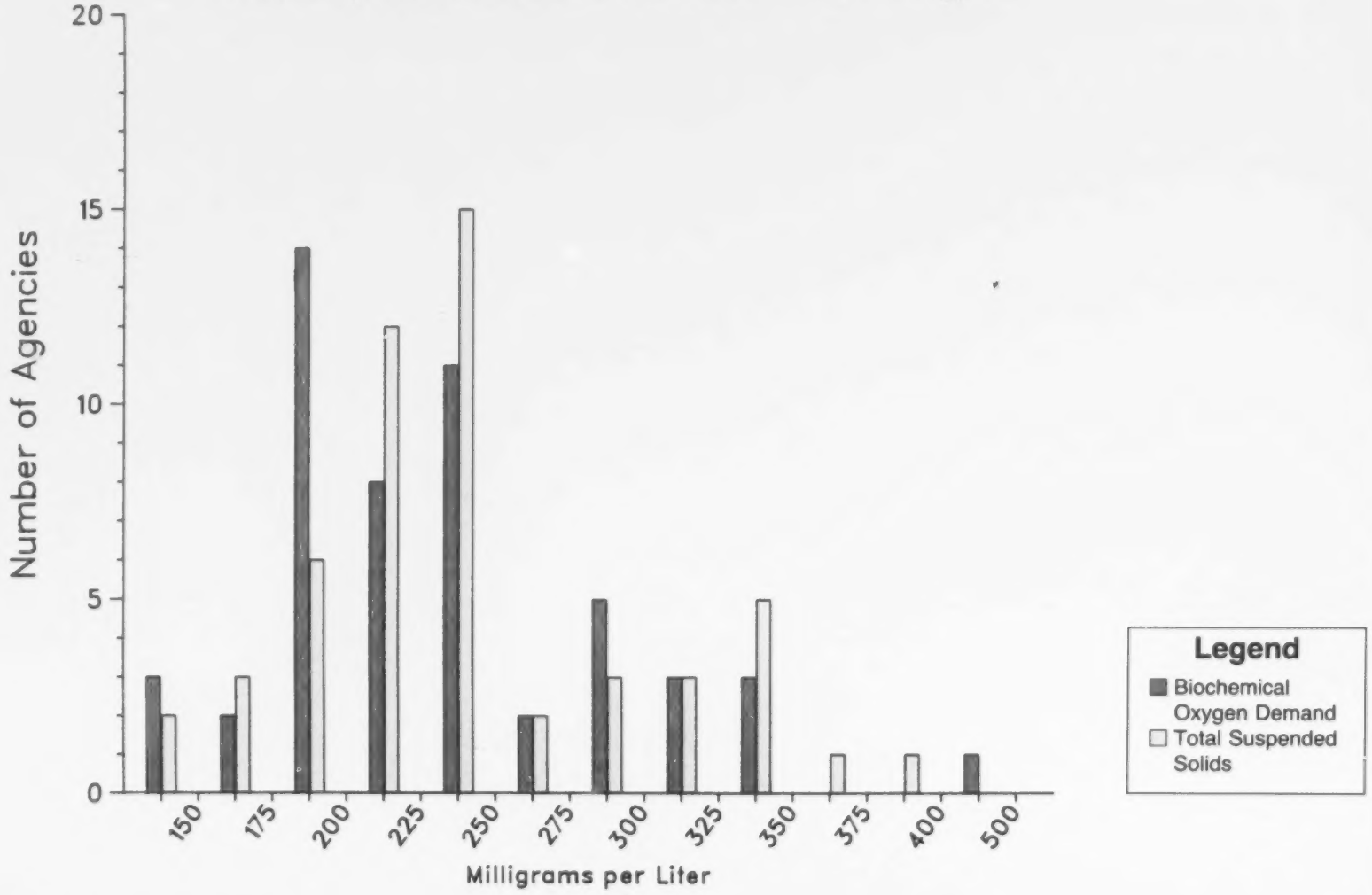
KINDS OF PLANTS
Primary – 30 (25 Discharge to oceans)
Secondary – 245
Tertiary – 52
Other – 11
Total 338
(78 Agencies Reporting)



PERCENTAGE SHARE OF TOTAL PLANT INFLUENT
Attributable To Various Sources
As Reported By 68 Agencies



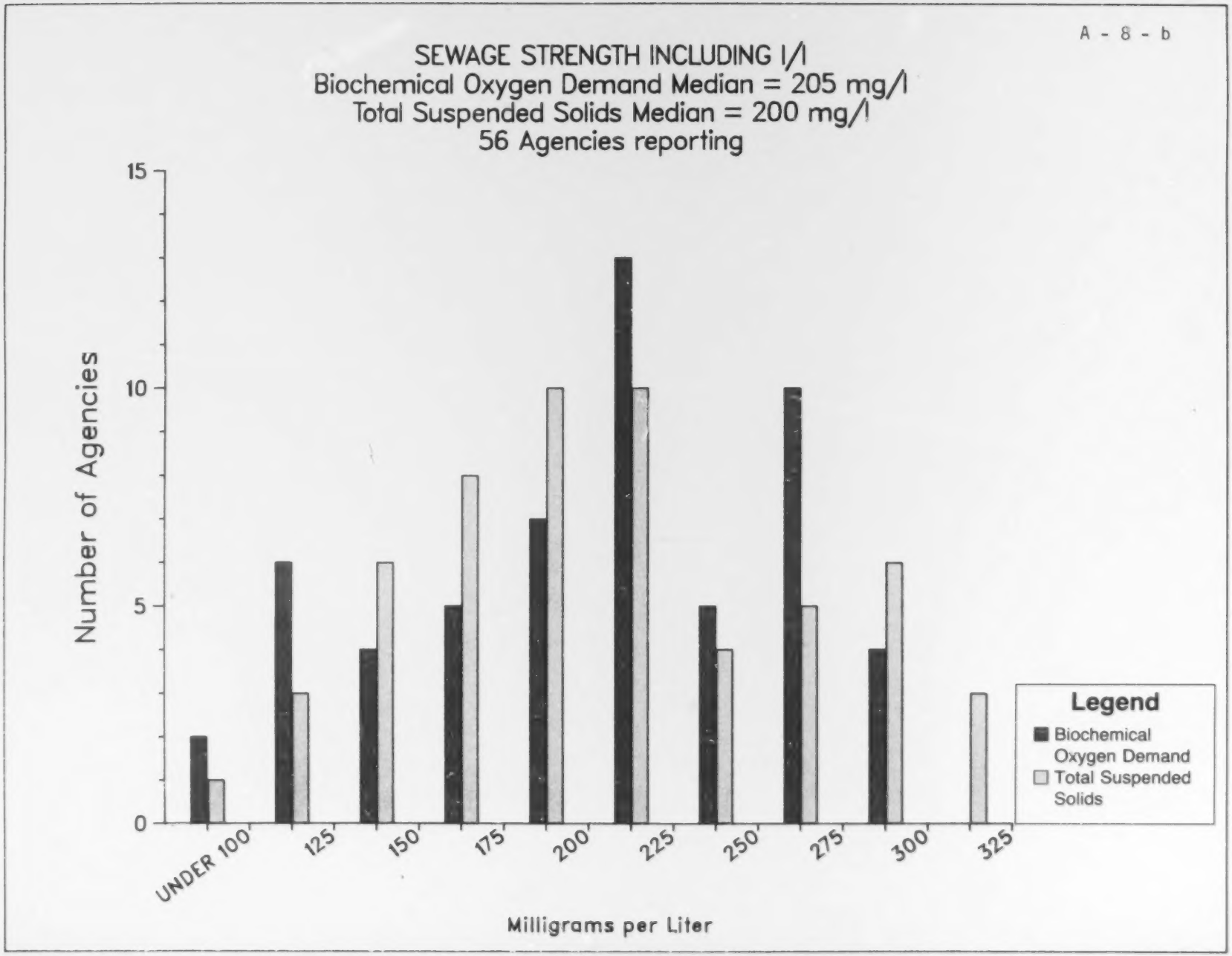
STRENGTH OF CUSTOMER WASTEWATERS
Biochemical Oxygen Demand Median = 220 mg/l
Total Suspended Solids Median = 230 mg/l



23 agencies listed only the strength of plant influent, including I/I. There were a total of 56 such responses, including the aforementioned 33 agencies that answered both questions. They ranged as follows:

Actual Plant Influent Including I/I	**BOD**	**TSS**
Minimum	84 mg/1	85 mg/1
Median	205 mg/1	200 mg/1
Average	197 mg/1	204 mg/1
Maximum	300 mg/1	400 mg/1

For a more detailed breakdown, see Graph A-8-b.


SEWAGE STRENGTH INCLUDING I/I
Biochemical Oxygen Demand Median = 205 mg/l
Total Suspended Solids Median = 200 mg/l
56 Agencies reporting
Number of Agencies
15
10
5
0
UNDER 100
125
150
175
200
225
250
275
300
325
Milligrams per Liter
Legend
Biochemical Oxygen Demand
Total Suspended Solids

SECTION B — FINANCIAL

SECTION B — FINANCIAL

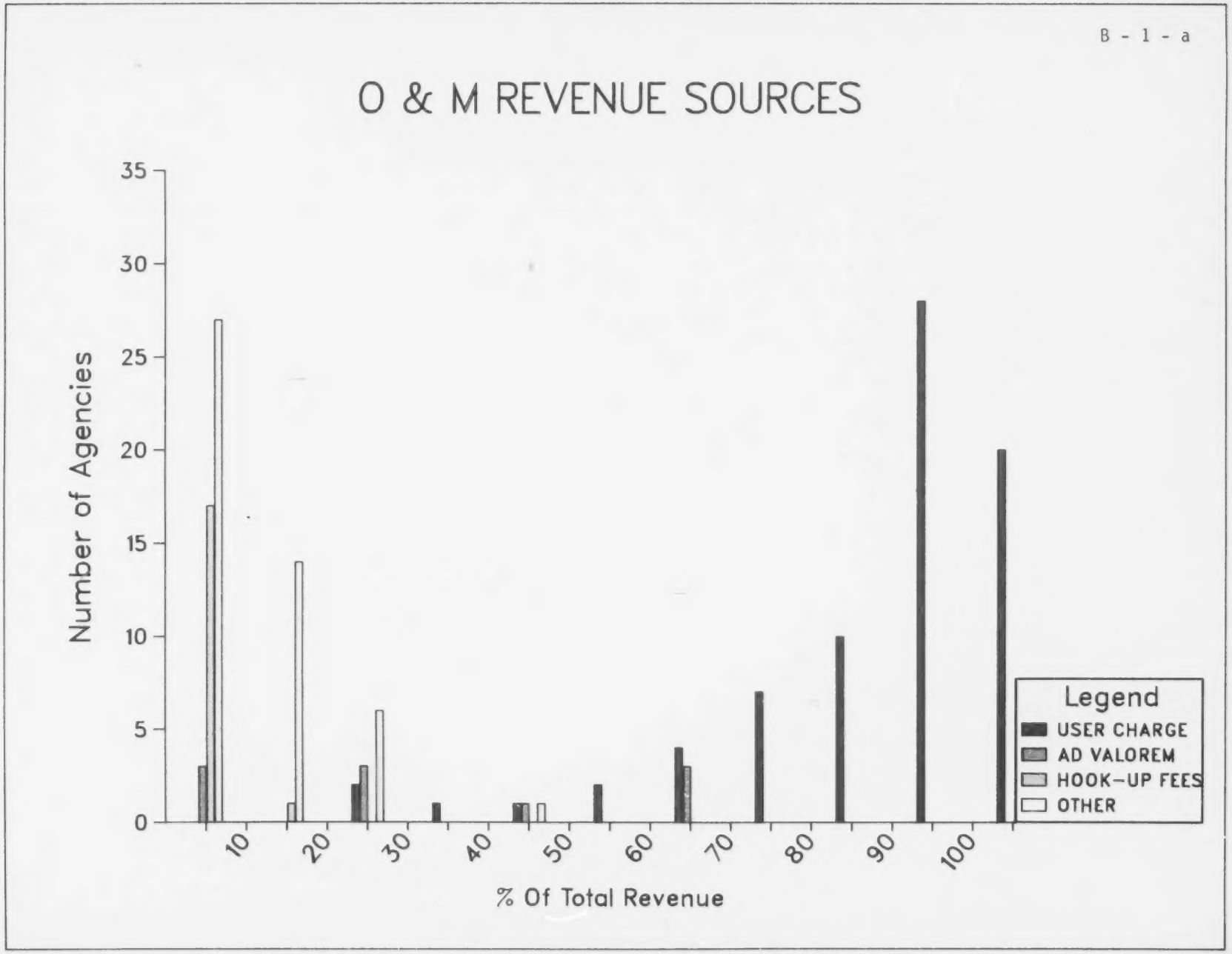
1.a *O & M Revenue Generation by Type*

User charges accounted for the highest percentage of O & M revenue generation from the 80 agencies reporting. Two-thirds of all agencies raised at least 90% of their O & M revenue from that source. The following analysis was developed based on percentage of revenue raised from each source.

Number of Agencies Using Each Source of Revenue

Share of Total Revenue	User Charges	Ad Valorem	Hook-Up Fees	Other
100%	20	—	—	—
90 - 100	28	—	—	—
80 - 90	10	—	—	—
70 - 80	8	—	—	—
60 - 70	4	3	—	—
50 - 60	2	—	—	—
40 - 50	1	1	—	1
30 - 40	1	—	—	—
20 - 30	2	3	—	6
10 - 20	—	—	1	14
0 - 10	—	1	17	27
	76	8	18	48

Also see Graph B-1-a., titled "O & M Revenue Sources."


O & M REVENUE SOURCES
Number of Agencies
35
30
25
20
15
10
5
0
10
20
30
40
50
60
70
80
90
100
% Of Total Revenue
Legend
USER CHARGE
AD VALOREM
HOOK-UP FEES
OTHER

1.b *Capital Revenue Generation by Type*

Again, user charges were the most common source for revenue, although the share of total revenue was not as high as for O & M federal grants increased the share provided by "Other" sources, for capital.

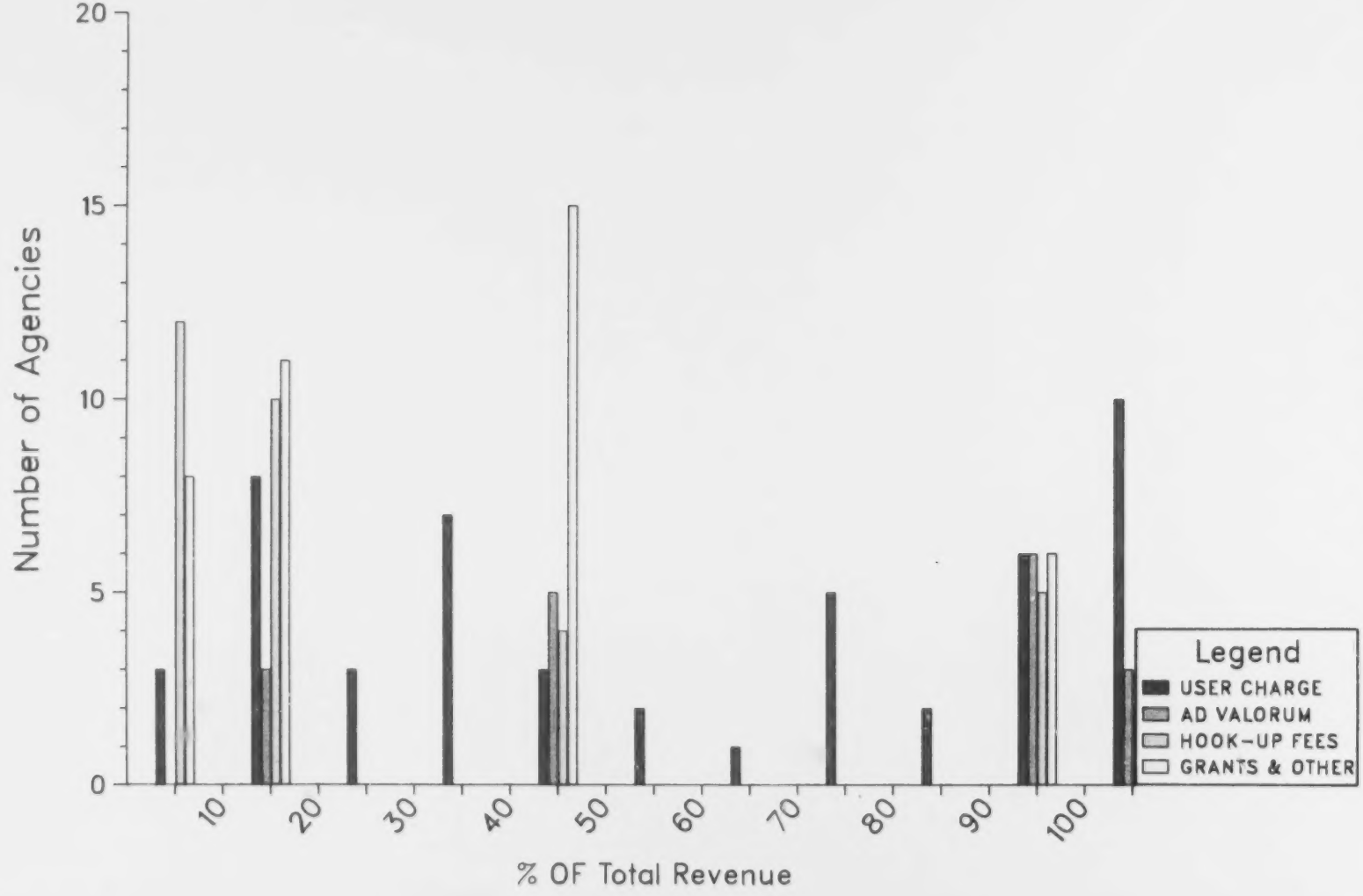
Number of Agencies Using Each Source of Revenue

Share of Total Revenue	User Charges	Ad Valorem	Hook-Up Fees	Other
100%	11	—	—	—
90 - 100	6	6	5	6
80 - 90	2	—	—	—
70 - 80	5	—	—	—
60 - 70	1	—	—	—
50 - 60	2	—	—	—
40 - 50	3	5	4	15
30 - 40	7	—	—	—
20 - 30	3	—	—	—
10 - 20	8	3	10	11
0 - 10	3	—	12	8
	51	14	31	40

Also see Graph B-1-b, titled "Capital Revenue Sources."

B - 1 - b

CAPITAL REVENUE SOURCES



2. *Annual O & M Expenditures*

In comparing O & M expenses for the years 1983, 1984 and 1985 with the 1986 budgets, increases over the four years were as follows:

Year	% of Overall Increase
1983 vs. 1984	8.8%
1984 vs 1985	6.9%
1985 vs 1986 Budget	13.6%
1983 vs 1986	34.5%

3. *1986 O & M Budget*

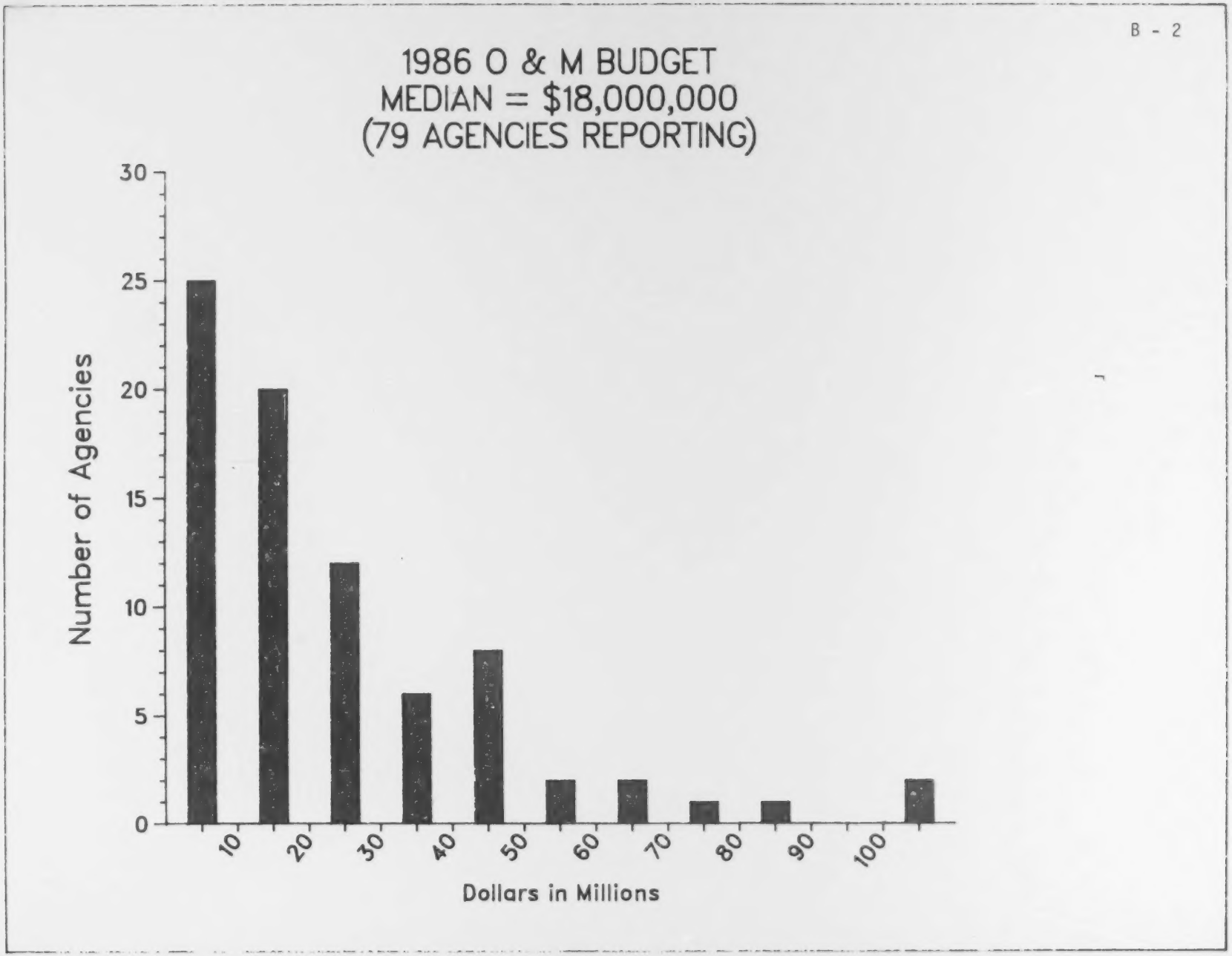
The largest agency reported a budget of $109,000,000, the smallest $1,600,000. The median among 79 agencies reporting was $18,000,000. See Graph B-2 for the full array of responses.

4. *Outstanding Debt*

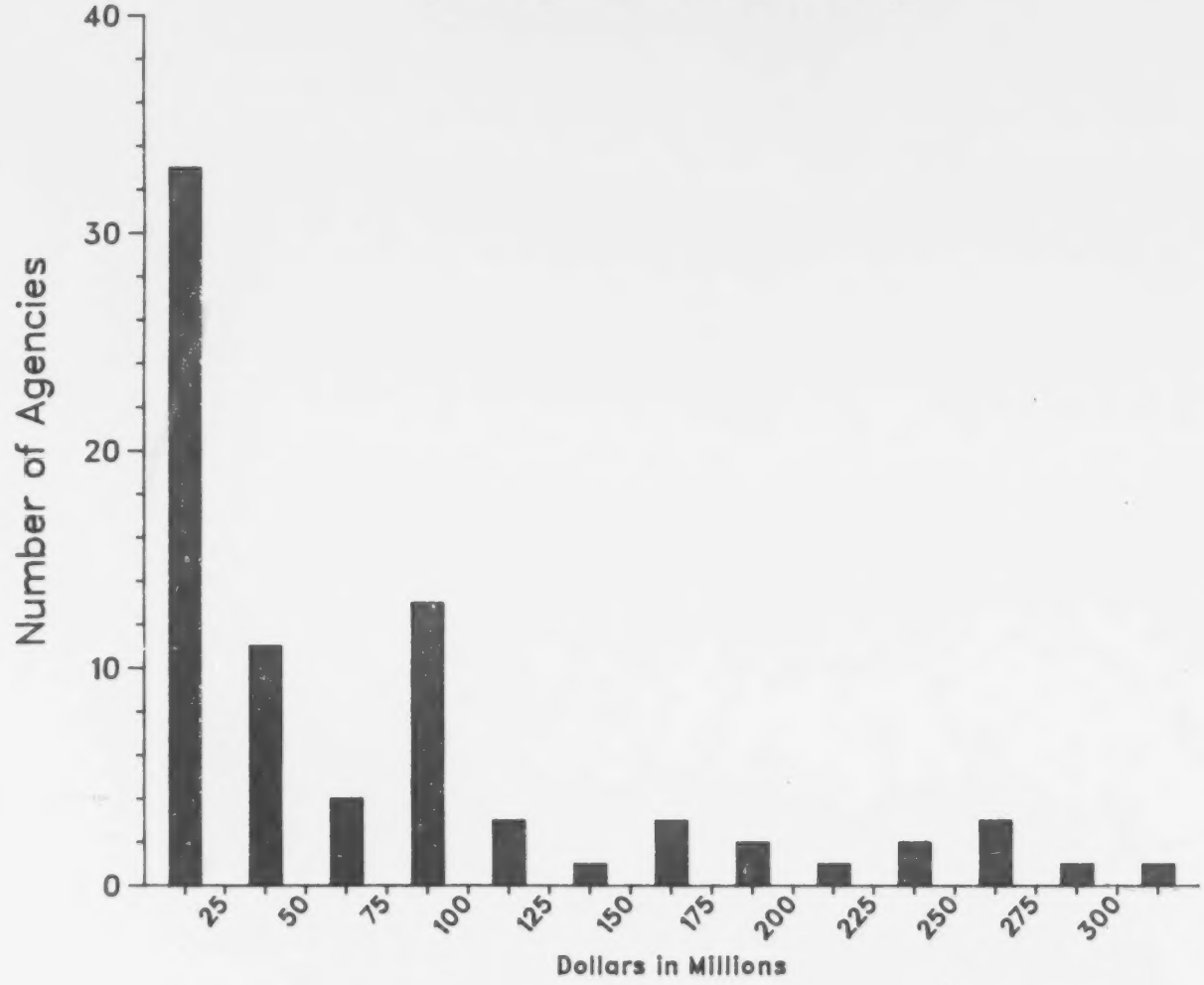
The largest outstanding debt reported was $720.8 Million, the smallest $231,000. The median among 78 agencies reporting was $37,000,000. See Graph B-3 for the full array of responses.

5. *Treatment Cost Per Million Dollars*

75% of the respondents reported treatment costs between $200 and $70 per million gallons. The median among 78 agencies reporting was $500. See graph B-4 for the full array of responses.

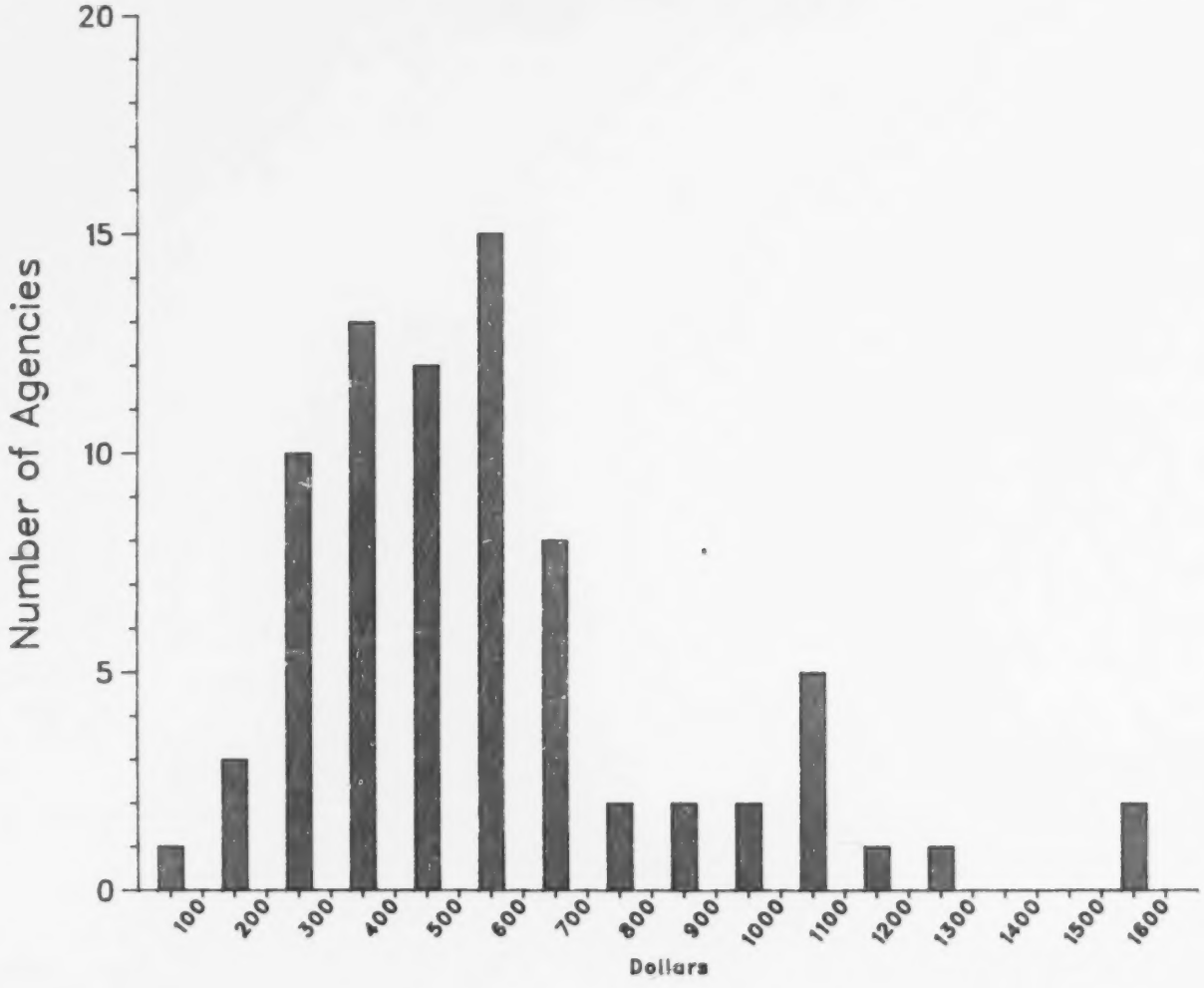

1986 O & M BUDGET
MEDIAN = $18,000,000
(79 AGENCIES REPORTING)
Number of Agencies
0
5
10
15
20
25
30
10
20
30
40
50
60
70
80
90
100
Dollars in Millions

OUTSTANDING DEBT
MEDIAN = $37,000,000
(78 Agencies Reporting)



B - 4

TREATMENT COST PER MGD
Mean = $500



SECTION C — RATES

SECTION C — RATES

1. *Charge Methods for Computing O & M Bills to Residences*

All agencies, both wholesalers and retailers, were asked to respond regarding the retailing basis used in the largest municipality they serve. 78 responses were received, as follows:

Basis	Communities
Metered Water Consumption	40
Metering, plus Flat Charge	19
Flat Charge	16
Ad Valorem Tax	3
TOTAL	78

Among the 59 communities that used water metering for at least part of the charge, three methods were identified as a calculation basis:

Metering Basis	Communities
Total Year-Round Consumption	28
A Percentage of Total Consumption	6
Wintertime Consumption, By Proxy	25
	59

Also see Pie Chart C-1.

2. *Residential Charge Rates for O & M*

Volumetric charges ranged from 13.1 cents to $2.50 per thousand gallons of metered water. Among the 55 that listed a volumetric charge, the median was 75 cents per 1,000 gallons, regardless of whether or not a flat fee was added on. See Graph C-2-a.

Flat charges ranged from $3.75 to $187.00 per year. Among the 16 agencies that relied on only the flat charge, the median was $90.00. Among the 19 agencies that levied both a flat charge and a volumetric charge, the median flat charge was $36.00. See Graph C-2-b.

3. *Average Annual Residential Bills*

a. O & M portion - ranged from $5.60 to $203.97 among 75 agencies with $68.00 median. See C-3-a.

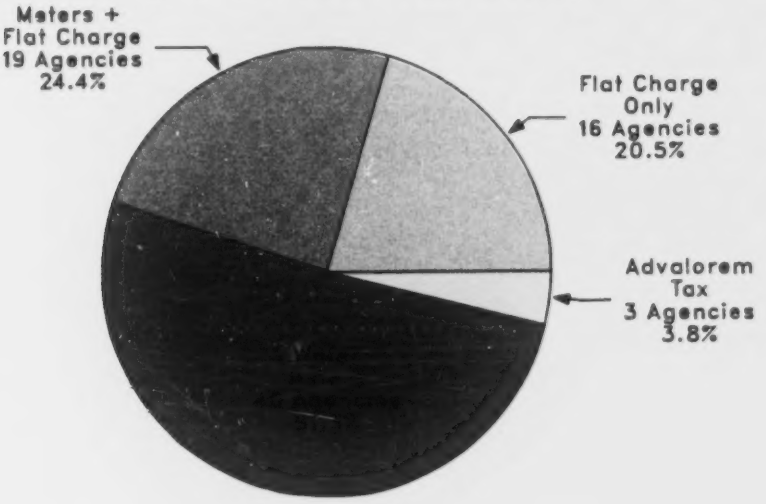
b. Debt Service/Capital - ranged from $1.19 to $222.00 among the 64 agencies with $25 as the median. See C-3-b.

c. Total (O & M plus Capital) - ranged from $6.00 to $357.84 with a median of $101.00.

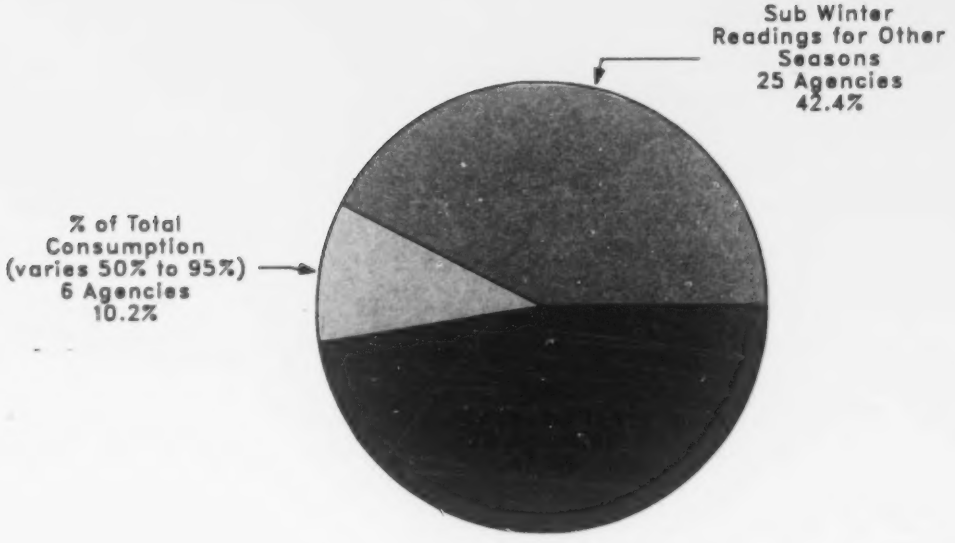
4. *Minimum Bill*

The minimum annual charge to a residence ranged from $2.00 to $225.00.

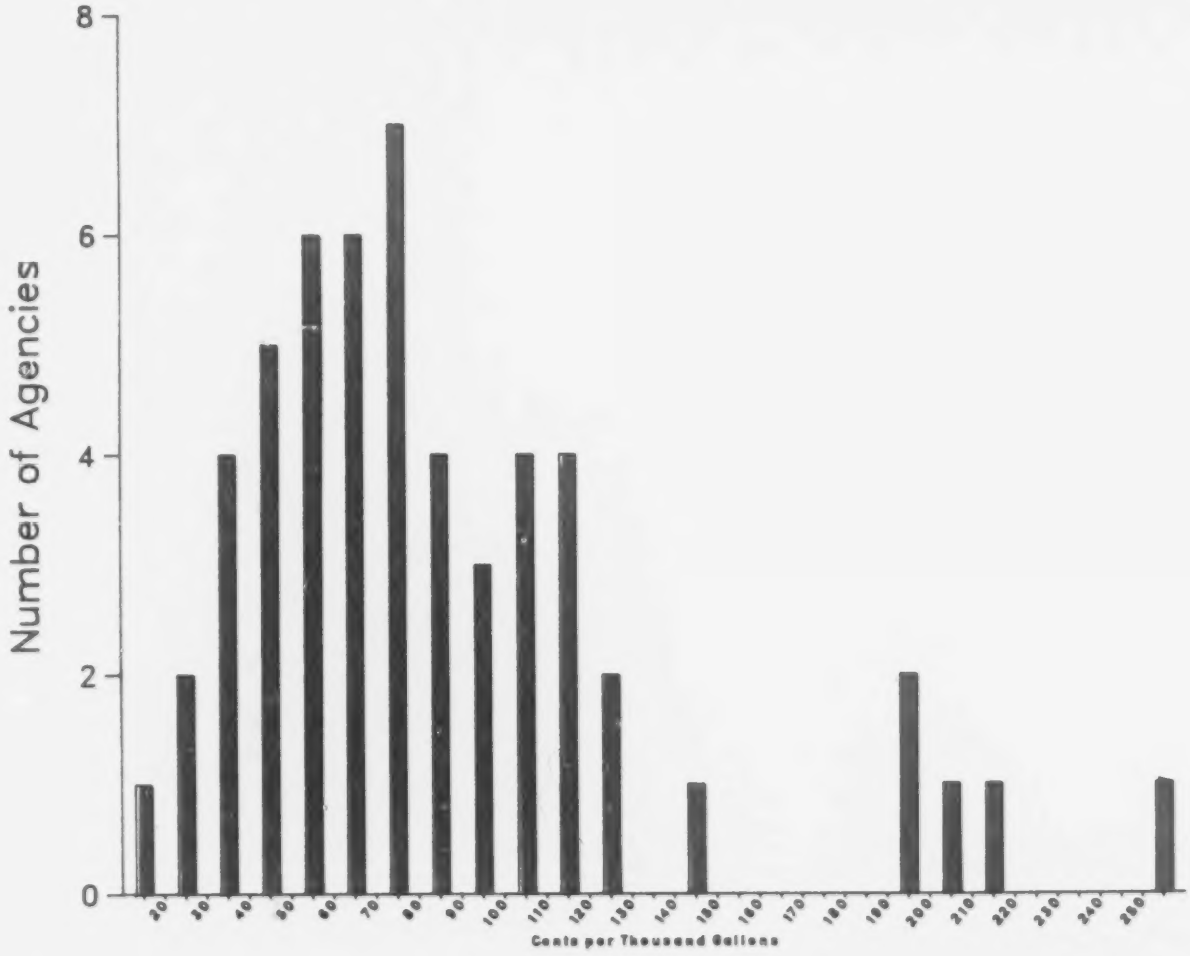
Charge Basis Used in 78 Communities for O & M Cost Recovery



Water Meter Data Base in 59 Communities



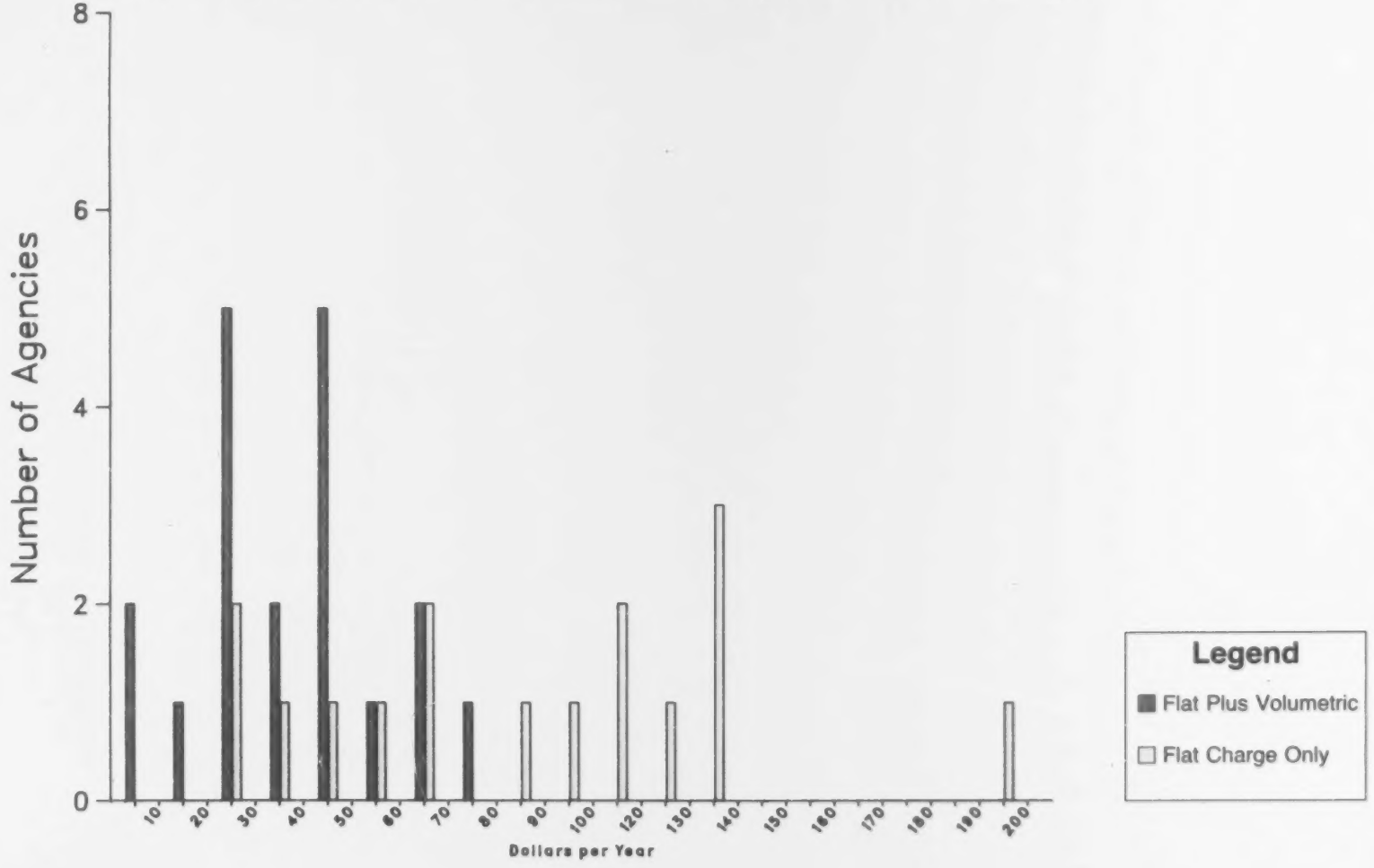
RESIDENTIAL VOLUMETRIC CHARGES FOR O & M
MEDIAN = 75 cents per 1000 Gallons



RESIDENTIAL FLAT CHARGES FOR O & M

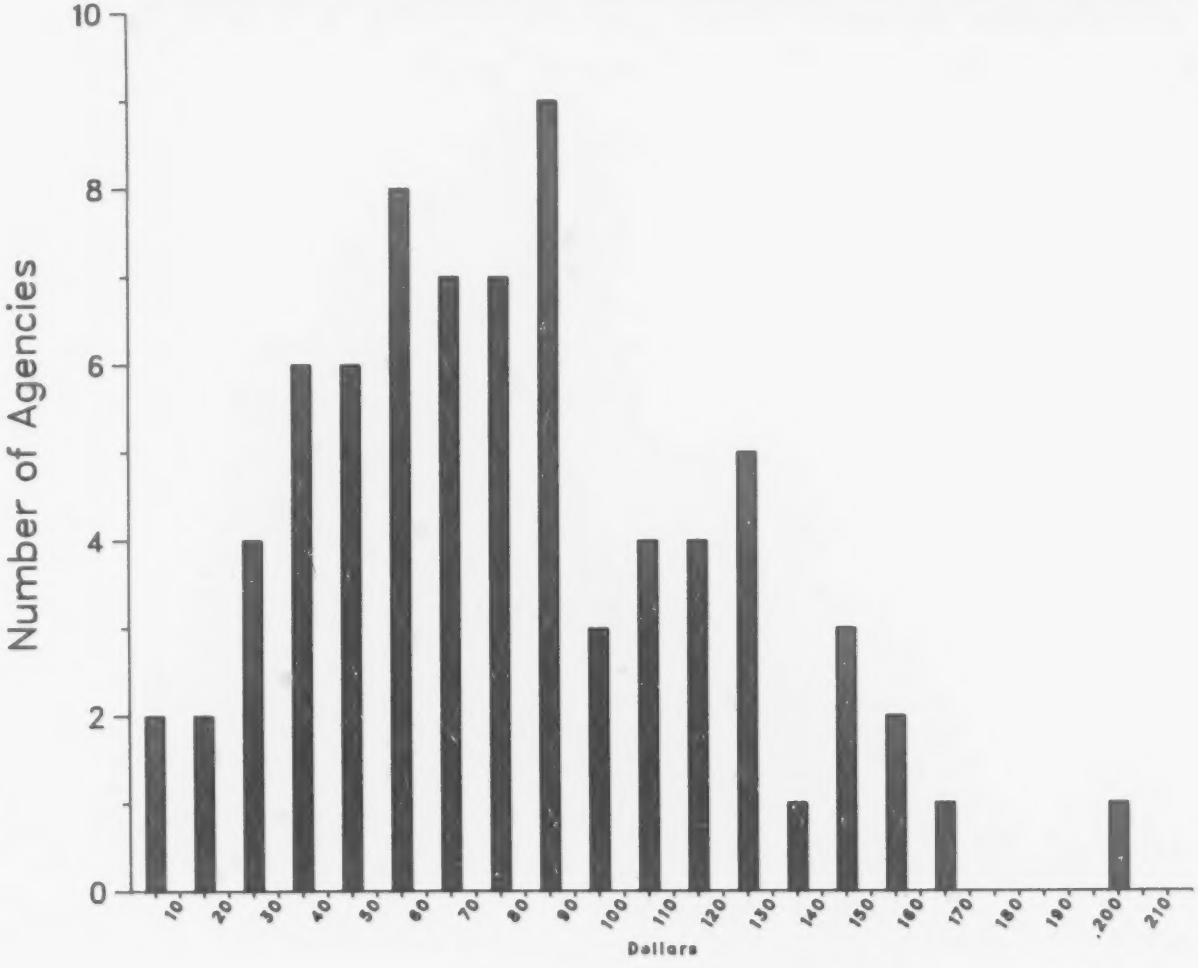
Flat Charge Only – Median = $90/year

Flat Plus Volumetric – Median = $36/year flat charge



C - 3 - a

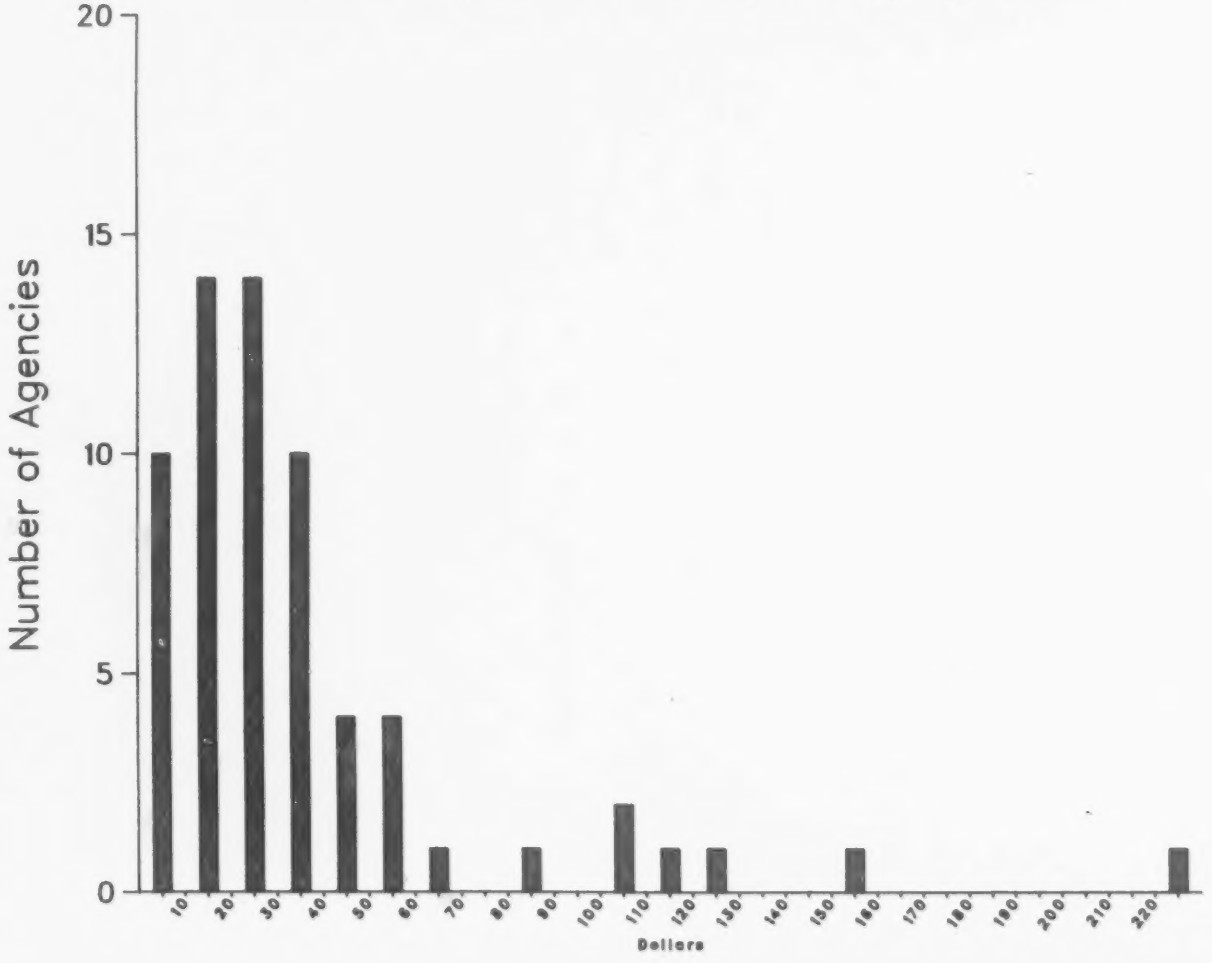
AVERAGE RESIDENTIAL O & M BILL
Median = $68 for 75 Reporting Agencies



C - 3 - b

AVERAGE RESIDENTIAL DEBT SERVICE/CAPITAL CHARGE

Median = $25 for 64 Reporting Agencies



5. *Frequency of Rate Adjustments*

Current rates were effective for a one-year period for 54 to 72 agencies that responded. Nine others had current rates in effect for two years, and the remaining nine have been using the same rates for 3 to 7 years. Most agencies adjust their rates on July 1.

6. *Charge Parameters for Cost Recovery From Industry*

Most agencies recover costs of treatment based on volume of flow, and quantities of BOD and Suspended Solids. Other additional charge parameters used by some are: Grease & Oil Phosphorus and Nitrogen.

Parameter	Agencies Responding	Median	Range
Flow	55	60¢/1,000 Gal.	8¢ to $2.86
BOD/COD	63	8.0¢ per Lb.	1¢ to .35
T.S.S.	63	8.2¢ per Lb.	1¢ to .41
Grease & Oil	6	4.0¢ per Lb.	2¢ to .23
Phosphorus	7	30¢ per Lb.	2¢ to 1.78
Nitrogen	5	36¢ per Lb.	7¢ to .88

Also see graph C-4-a and C-4-b.

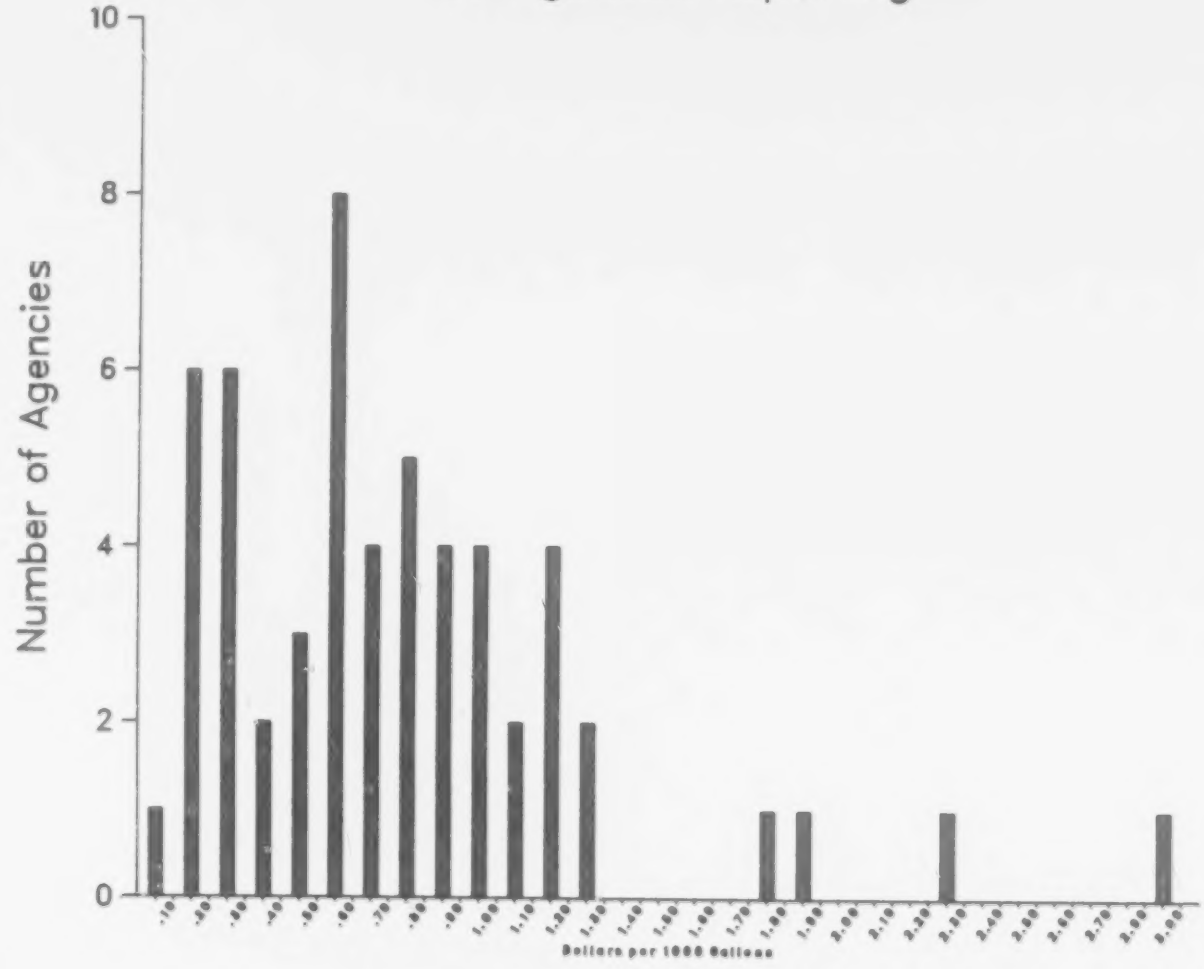
7. Forty-five agencies indicated that the charge rates in Item #6 included debt retirement. Twenty-seven agencies use these volumetric charges for O & M only.

8.&9. Forty agencies indicated that the rates of Item #6 were also used to computer residential charges. Thirty-two others had different rates, or charged on the basis of flow volume only. See Computer Report #10 for further detail.

10. Fifty-three agencies indicated that they surcharge industry for wasteloads of higher concentration than domestic strength. The manner in which they do so is tabulated in Computer Report #11.

11. Forty-four agencies indicated that they had a methodology for allocating the costs of operating various treatment processes to charge parameters. The manner in which they do so is tabulated in Computer Report #11.

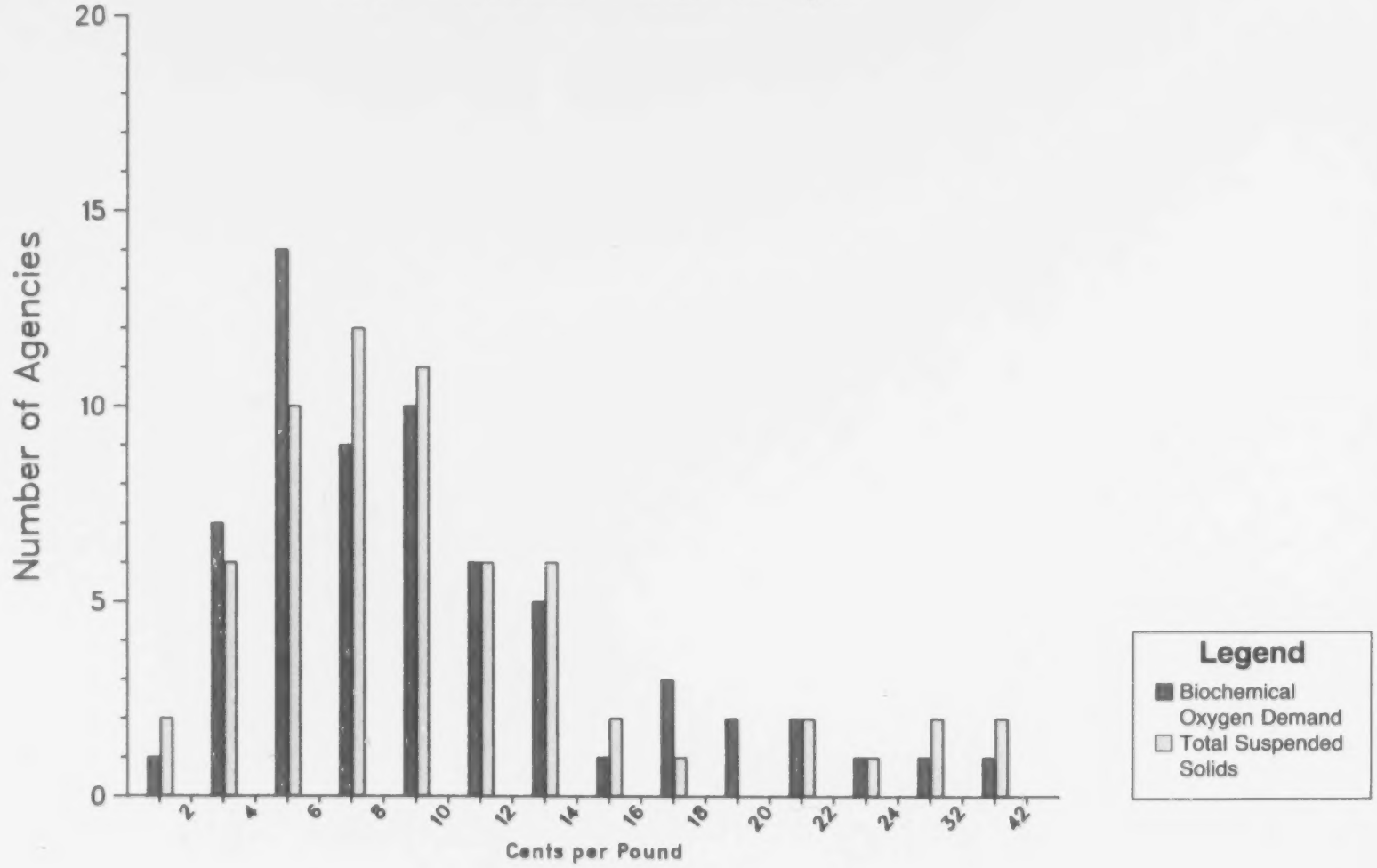
FLOW PARAMETER CHARGES
Median = $0.60 per 1000 Gallons
55 Agencies Reporting



UNIT CHARGES FOR WASTELOAD PARAMETERS

BOD – Median = 8 cents/lb

TSS – Median = 8.2 cents/lb



SECTION D — BILLING AND COLLECTION INFORMATION

SECTION D — BILLING AND COLLECTION INFORMATION

1,2,3 *Agencies Billing Procedures*

The responses received regarding whom each agency bills, their frequency of billing, and whether the agency billing system is computerized is analyzed below:

		Billing Frequency				
Whom Agency Direct Bills	**No. of Agencies**	**Mo.**	**Qtr.**	**Ann.**	**Other**	**Billing System is Computerized**
All Users	43	24	12	3	3	39
Cities Only	12	5	4	2	—	9
Cities and/or Large Users	6	3	1	2	—	5
Other Miscellaneous	16	7	5	2	1	14
TOTALS	77	39	22	9	4	67

4. *Deliquency of Accounts Receivable*

The median percentage of accounts reported delinquent did not vary much with duration of elapsed time, although the number of agencies reporting delinquencies decreased as the number of days past due increased. See below:

	Number of Days Delinquent				
	30 - 60	**60 - 90**	**90 - 120**	**120 - 180**	**Over 180**
Low	0%	.0 %	.1 %	0.05%	0.01%
Medium	5%	3.5 %	3.0 %	3.75%	6.0 %
High	95%	51.0 %	36.0 %	53.00%	45.0 %
#/Agencies	36	34	25	19	15

5. *Interest Rate Charged on Delinquent Accounts*

Sixty-one agencies responded. Of that total, 28 indicated they charged no interest. The other 33 reported rates up to 21%, with the median being 12% per year.

6. *Average Billing and Collection Cost*

Half of the 80 agencies responded to this question. The range of costs per bill issued were as follows:

Billing Cost	**Number of Agencies**
Under 50¢	5
50¢ to $1.00	14
$1.00 to $2.00	8
$2.00 to $3.00	4
$3.00 to $4.00	5
Over $4.00	4
	40

The median cost among the respondents was $1.25.

SECTION E — OTHER RATE INFORMATION

SECTION E — OTHER RATE INFORMATION

1. *Type of System-Separate or Combined*

Of the 67 agencies responding 41 served separated areas only, and one served a combined area only. Among the remaining 25, a combined storm and sanitary system comprised from 5% to 98% of their service area, 53 had a I/I reduction program in place:

No. of Agencies	Separated/Combined Ratio(%)	I/I Reduction Program
41	100%	32
6	90/10	5
4	80/20	3
5	70/30	5
4	60/40	3
3	50/50	3
1	43/57	1
1	35/65	0
1	2/98	0
1	0/100	1
67		53

2,3,4. *Infiltratrion/Inflow*

Fifty-nine agencies indicated they had an I/I reduction program in place. Due to the small number of responses, no analysis was made of the nature or costs of programs.

5. *Septic and Holding Tank Dischargers*

Of seventy-four responses, 51 agencies levy a charge upon residential septic tank discharges, and 53 agencies also accept commerical discharges for a fee.

SECTION F — CAPITAL COST RECOVERY (DEBT RETIREMENT)

SECTION F - CAPITAL COST RECOVERY (DEBT RETIREMENT)

1. *PL 92-500 Pollution Abatement Programs*

   Fifty-five agencies indicated they were currently planning, designing or constructing pollution abatement works. Eighteen responded negatively.

2. *Program Costs*

Million Dollars	No. Of Agencies
0-24	22
25-49	9
50-74	3
75-99	6
100-200	4
200-1,000	6
Over 1,000	1
	51

3. *State and/or Federal Grants*

   Forty agencies indicated they were receiving grants-in-aid. The amounts ranged from 14% to 95% of total program costs. 25 of the agencies were in the 50% to 80% range, with the median being 64%.

4. *Financing Period*

   Among the 29 respondents, 15 agencies had 20 year debt retirement programs and 6 had 30 year programs. The maximum was 32 years and the minimum was one year.

SECTION G - AGENCIES PROVIDING WHOLESALE SERVICE

SECTION G-AGENCIES PROVIDING WHOLESALE SERVICE

1. *Number of Customers Served*

   Responses ranged from one to 105 municipalities, with the median being eight.

Wholesale Customers	Number of Agencies
5 or less	11
6 to 10	12
11 to 25	9
26 to 105	8
	40

2. *Measuring Procedures*

   Among the 39 respondents, wholesale customers' charges were computed in the following manner:

Methodology	No. of Agencies
Sewage Meters-All Customers	16
Sewage and Water Meters	10
Sewage Meters & Various Formulae	8
Water Meters-All Customers	2
Water Meters & Various Formulae	2
Equivalency Factors Only	1
	39

   Among the 28 agencies that relied exclusively on sewage and/or water meters, 19 were able to measure flows using one meter per customer. The other 9 required multiple meters.

3. *Determination of Customers' Wastewater Characteristics*

   - 26 agencies relied exclusively on sample analysis.
   - 1 agency relied exclusively on estimated concentrations.
   - 8 employed a combination of the two methods.

4. *Monitoring Frequency*

   Eighteen agencies employed daily monitoring, and nine others did so less frequently.

5. *Billing Frequency*

Cycle	No. of Agencies
Monthly	24
Quarterly	15
Annually	3
	42

6. *Retail Billings*

Fourteen of the 43 wholesalers also handle billing to individual users.

7,8, 9,10. *Monitoring Costs, Parameter Charges, Administrative Fees*

Responses to these questions can be found on Computer Reports #16 and #17.

SURVEY QUESTIONNAIRE

AMSA 1986 RATE SURVEY

A. GENERAL

1. Agency Name: _____
2. Form Completed by: _____
   Title: _____ Telephone _____
3. Residential Population served _____
4. Number of sewer connections _____
5. Are you a wholesaler (bill municipalities) or a retailer (bill users) agency?
   Wholesaler _____ % Retailer _____ %
6. What was total average daily inflow treated by your agency in 1985?
   _____
7. Current service area: _____ sq. miles
8. Size of Agency (or department) staff: _____
9. What is your present level of service?
   A. Treatment only _____
   B. Interceptor and Treatment _____
   C. Total Collection and Treatment _____
   D. Storm water, total collection and treatment _____
   E. Other _____
   _____
10. Systemwide, group your plants by present level of treatment, indicating the total capacity of the plants and the percent of the total flow that they serve.

	Number of Plants	Total Plant(s) Design Capacity	Percent of Total Flow
A. Primary			
B. Secondary			
C. Tertiary			
D. Other			
		TOTAL	100%

11. In a year of average precipitation, what portion of your total flow is:

Infiltration/Inflow	_____ %	_____	MGD
Residential Wastewater	_____ %	_____	MGD
Comm. & Ind. Wastewater	_____ %	_____	MGD
TOTAL	100 %	_____	MGD

12. What is your assumed strength of *domestic* sewage?

	Without I/I	Including I/I
A. BOD	_____	_____
B. SS (suspended solids)	_____	_____
C. Other (please identify)	_____	_____
_____	_____	_____
_____	_____	_____

B. FINANCIAL

1. Revenue generation for POTW last fiscal year was broken down as follows:

	Operation & Maintenance	Capital Improvements &/or Debt Retirement
User Charge Only	_____ %	_____ %
Ad Valorem Tax Only	_____ %	_____ %
Special Levies	_____ %	_____ %
Hook-up Fees	_____ %	_____ %
Grants - Federal	_____ %	_____ %
- State	_____ %	_____ %
Other (If more than 10 % of total revenue, please identify) _____	_____ %	_____ %
Total Revenue	100 %	100 %
Total Revenue Generation in dollars	$ _____	$ _____

2. What were your annual O & M expenditures (do not include debt service) for fiscal years ending in:

1985	$ _____
1984	$ _____
1983	$ _____

3. What is your budget for O & M expenditures for 1986? $ _____
4. What is total amount of debt service outstanding at present time?
   $ _____
5. Treatment cost per million gallons: $ _____

C. RATES

NOTE TO ALL WHOLESALERS: Please complete this section of the survey using retail figures for users in the largest community you serve.

1. In your system, what is the most common basis for determining the residential sewage volume?

		% of Total
A.	100% metered water	_____ %
B.	____ % metered water	_____ %
C.	Winter metered water	_____ %
D.	Flat rate	_____ %
E.	Other _____ (please identify)	_____ %
	_____	_____ %

2. How do you charge residential users for O & M?

___ Flat rate How much? _____ $/unit/year

___ Volumetric rate How much? _____ ¢/1000 gal.

___ Both of the above.

3. a. What is the current average annual bill for a one-family residential user for Operation and Maintenance only?

$ _____

b. What is the current average annual bill for a one-family residential user for debt service and/or capital charges only? (NOTE: If ad valorum taxes used for debt retirement, calculate tax on average one family dwelling and include.)

$ _____

c. Total $ _____

4. What is your current minimum annual residential bill? $ _____

5. These rates will be in effect from _____ to _____

6. List your charges rates for treating industrial rates.

Suspended Solids _____ (¢ per lb.)

BOD/COD _____ (¢ per lb.)

Flow _____ (¢ per thousand gals.)

Other (Please describe and indicate unit)

_____ _____ (¢ per _____)

_____ _____ (¢ per _____)

7. Do these rates include debt retirement _____ or are they for O & M only? _____

Are the charge rates of question 6 (above) also used to compute the residential rates?

Yes _____ No _____

9. If "no" what is the basis for the residential rate computation? Please explain.

_____

_____

11. Do you allocate agency costs (capital and O & M) to treatment parameters, including flow, BOD/COD and suspended solids? If yes, please describe?

_____

_____

D. BILLING AND COLLECTION INFORMATION

1. Does your agency do its own direct billing to:

   All Users _____

   Commercial & Industrial only _____

   Cities only _____

   Other (Describe) _____

   _____

2. How often do you direct bill?

   Annually _____ Semi-Annually _____ Quarterly _____

   Monthly _____ Other (Specify) _____

3. Is your billing system computerized? Yes _____ No _____

4. What % of your 1985 receivables were:

   More than 30 days, but less that 60 days delinquent _____%

   More than 60 days, but less than 90 days delinquent _____%

   More than 90 days, but less than 120 days delinquent _____%

   More than 120 days, but less than 180 days delinquent _____%

   More than 180 days delinquent _____%

5. What is the annual rate of interest charged on delinquent accounts? _____%

6. Average billing and collection costs per bill. $ _____

E. OTHER RATE INFORMATION

1. Please indicated if you are a combined sewer/storm water system or a separate system and how you charge for infiltration/inflow (I/I) under your system. (If both, indicate percentage of service area of each.)

   Combined system _____%

   I/I charged _____

   Separate system _____%

   I/I charged _____

2. Does your agency have an I/I reduction program? Yes _____ No _____

3. If yes, describe basis for program.

_____

4. Share of total program cost allocated to CSO abatement $_____
5. Does your agency (or community) levy a charge for residential septic tank dischargers?

   Yes _____ No _____

   For commercial and industrial septic tank or holding tank dischargers?

   Yes _____ No _____

F. CAPITAL COST RECOVERY (DEBT RETIREMENT)

1. Are you currently planning, designing and/or constructing a PL 92-500 mandated pollution abatement program? Yes _____ No _____
2. Total cost (in 1985 $): $ _____
3. State and/or Federal Grants are _____ % of total
4. Number of years to recover local share of cost: _____
5. Portion funded locally in 1985: $ _____

G. AGENCIES PROVIDING WHOLESALE SERVICE

NOTE: This section of the survey should be answered only by Wholesalers (agencies who provide service and deal mainly with other communities as opposed to individual users).

1. How many wholesale customers do you serve? _____
2. How are the wholesale customers' flow measured? Indicate the number of wholesale customers where each type of flow measurement is used.

   a. Sewage Meters _____
   b. Water Meters _____
   c. Connections _____
   d. Equivalent Connections _____
   e. Other (specify) _____

3. How are the wholesale customers' wastewater characteristics determined? Indicate the number of wholesale customers where each type of determination is used.

   a. Wastewater Samples _____
   b. Estimated Concentrations _____
   c. Other (specify) _____

4. What is the frequency for monitoring wholesale customer's wastewater for billing purposes? _____ days per billing period.
5. How frequently are your wholesale customers' billed?

   Annually _____ Semi-Annually _____ Quarterly _____

   Monthly _____ Other (specify) _____

6. Do you issue bills to all of the individual sewer customers?

   Yes _____ No _____

7. What were your total 1985 costs for monitoring and billing? $ _____

8. Please indicate your 1983 rates for the following parameters:

a. Volume (@ zero strength)	$ _____ per 1,000 gallons
b. BOD_5	$ _____ per pound
c. Suspended Solids	$ _____ per pound
d. Phosphorus	$ _____ per pound of P.
e. Nitrogen	$ _____ per pound of N.
f. Fats, Oils, and Greases	$ _____ per pound
g. Customer Charge	$ _____ per residential user per year
h. Other (specify)	$ _____ per $ _____

9. If the strength parameters are billed on a surcharge basis, what is the volume charge for wastewater that is below the surcharge limits?

   $ _____ per 1,000 gallons

10. Do the municipalilties add charges for administration local sewer O & M, etc.?

    How much per year? _____

COMPUTER DATA

RPT1

SECTION A
GENERAL INFORMATION

AGENCY_ID	AGENCY_NAME	QUESTION 3 RES_POP_SERVED	4 NBR_SEWER_CONNECTS	5 WHSE RETAIL BOTH	7 CUPRENT SERVICE AREA	8 SIZE OF STAFF
1	JEFFERSON COUNTY PUBLIC WORKS, AL	500,000	117,534	R		300
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK	188,673	77,722	B	2000	303
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	1,000,000	241,650	B		200
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ	600,000	142,000	R	9180	295
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	165,000	55,000	R	100	155
6	PINE BLUFF WASTEWATER UTILITY, AR	61,000	18,000	R	25	35
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	394,000		W	252	90
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	2,000,000	500,000	O	330	350
9	CITY OF LOS ANGLE - DPW, CA	3,500,000	680,000	B	540	1200
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	357,000	96,000	B	120	220
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	600,000	175,232	B	83	232
13	CITY OF SAN DIEGO, CA	978,900	231,788	B	331	353
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	719,000	165,000	B	45	521
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	1,100,000	356,500	W	300	238
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	4,430,093	1,029,926	R	759	1269
18	CITY OF COLORADO SPRINGS, CO	310,000	77,023	B	139	127
19	METRO DENVER SEWERAGE DISPOSAL DIST #	1,200,000		W	325	275
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	352,000	97,973	B	134	620
21	WATER & SEWER UTILITY ADMINISTRATION, DC	2,000,000	120,000	B	725	1500
22	CITY OF JACKSONVILLE, FL	320,732	80,183	R	83	382
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	1,218,000	157,200	B	290	850
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	100,000	37,521	R	400	223
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	95,000	36,666	R	50	365
27	DEPT OF SAN SEWERS, CITY OF TAMPA	331,230	86,144	B	266	355
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	1,560,000	124,000	B	356	347
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI	635,000	121,000	R	150	570
31	MSD OF GREATER CHICAGO, IL	5,100,000		R	872	2344
32	SANITARY DISTRICT OF ROCKFORD, IL	200,000			63	
33	PUBLIC WORKS, INDIANAPOLIS IN	771,800	15	B	402	425
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	303,070				300
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	450,000	150,000	R	150	600
36	SEWERAGE & WATER OF NEW ORLEANS, LA	556,913	150,000	R		600
37	CITY OF BALTIMORE, DPW, MD	1,700,000	480,000	R	256	824
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	60,263	61,402	B	416	177
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA	261,000	2	W	68	49
44	DETROIT SEWER & WATER DEPT., MI	3,000,000	2,927,300	B	753	1177
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	97,000	31,056	B	100	103
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	1,850,000	990,000	W	1800	961
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	530,000	110,000	B	316	290
50	METRO ST. LOUIS SEWER DIST	1,100,000	395,520	R	524	840
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	474,673	115,256	B	138	244
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	390,000		W	560	200
54	BERGEN COUNTY UTILITES AUTHORITY, NJ	476,000		W	100	210
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	1,200,000	150	W	99	520
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM	400,000	107,500	R	115	179
60	BUFFALO SEWER AUTHORITY, NY	500,000	23,500	B	280	3
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	126,193	44,800	R	308	308
68	MSD OF GREATER CINCINNATI, OH	864,000	200,000	R	400	603
69	NE OHIO REGIONAL SEWER DISTRICT, OH	1,400,000	270,000	B	300	650

SECTION A

RPT1

GENERAL INFORMATION

AGENCY_ID	AGENCY_NAME	3 RES_POP_SERVED	4 NBR_SEWER_CONNECTS	5 WHSE RETAIL BOTH	7 CURRENT SERVICE AREA	8 SIZE OF STAFF
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	800,000	190,000	R	435	412
71	CITY OF DAYTON, OH	330,000	110,000	B	160	106
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	454,000	120,000	R	114	244
73	CITY OF TULSA WATER & SEWER DEPT., OK	376,500	115,539	R	158	192
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR	275,000	120,000	B	70	205
76	CITY OF PHILADELPHIA WATER DEPT	1,688,210	497,346	B	279	1900
78	NARRAGANSETT BAY COMMISSION	210,000	45,000	R	50	125
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	194,000	48,000	B	150	141
81	CITY OF MEMPHIS, TN	850,000	229,368	B	390	326
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	341,415	106,450	B	400	8
83	TRINITY RIVER AUTHORITY OF TEXAS	700,000	19	W		148
84	DALLAS WATER UTILITIES, TX	1,030,914	247,789	B	387	1897
85	EL PASO WATER UTILITES, TX	500,000	108,000	R	240	225
86	FORT WORTH WATER DEPT, TX	694,500	169,744	B	800	400
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	1,100,000	241,000	B	400	622
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT	375,000	46,121	R	75	108
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT	670,200	168,883	R	399	446
93	HAMPTON ROADS SANITATION DISTRICT, VA	1,057,387	268,694	R	697	574
94	MUNICIPALITY OF METRO. SEATTLE, WA	1,000,000	295,000	W	430	459
95	CITY OF TACOMA SEWER UTILITY, WA	200,000	60,000	B	58	100
96	GREEN BAY MSD, WI	145,115	43,831	W	121	116
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	250,000	63,000	W	146	80
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	991,500	267,000	W	221	665
99	ENCINA WATER POLL. CONTROL FACILITY, CA	175,000	73,500	W	117	45
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	85,000	22,000	R		32
101	DOWNERS GROVE SAN DIST, IL	62,000	18,600	R	20	29
102	SANITARY DISTRICT OF ELGIN, IL	102,500	27,000	B	30	9
104	SPRINGFIELD SANITARY DISTRICT, IL	130,000	41,700	R		37
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	36,200	6,700	B	18	52
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	35,000	6	W	85	16
110	LITTLE BLUE VALLY SEWER DISTRICT, MO	260,000	21	W		46

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SECTION A (CONT'D)—SERVICE LEVEL

ID	NAME	9 LEVEL OF SERVICE	6 AVE. DAILY INFLOW	11 I/I %	11 RES. FLOW %	11 COMM &IND %	12 WASTE WATER BOD MG/L	12 WASTE WATER SS MG/L	12 INCLUDING I/I BOD MG/L	INCLUDING I/I SS MG/L
1	JEFFERSON COUNTY PUBLI	INTERCEPTOR TREATMENT	105				200.00	200.00		
2	ANCHORAGE WATER & WAST	COLLECTOR TREATMENT	31	35.6	38.9	25.5			250.00	200.00
3	CITY OF PHOENIX WATER	INTERCEPTOR TREATMENT	142		65.0	35.0	220.00	175.00	220.00	175.00
4	PIMA COUNTY WASTEWATER	COLLECTOR TREATMENT	47		73.8	26.2	218.00	233.00	218.00	233.00
5	CITY OF LITTLE ROCK WA	COLLECTOR TREATMENT	36	39.0	53.0	8.0	300.00	300.00	180.00	180.00
6	PINE BLUFF WASTEWATER	COLLECTOR TREATMENT	9	15.0	70.0	15.0	300.00	250.00	250.00	200.00
7	CHINO BASIN MUNICIPAL	INTERCEPTOR TREATMENT	30	0.0	72.0	28.0	230.00	220.00	230.00	220.00
8	COUNTY SANITATION DIST	INTERCEPTOR TREATMENT	233	2.0	73.0	25.0	255.00	255.00	255.00	255.00
9	CITY OF LOS ANGLE - DP	COLLECTOR TREATMENT	470	40.0	22.0	38.0	230.00	250.00		
10	CENTRAL CONTRA COSTA S	COLLECTOR TREATMENT	38	6.0	76.0	18.0	200.00	260.00		
11	EAST BAY MUNICIPAL UTI	INTERCEPTOR TREATMENT	80	11.0	54.0	34.0	350.00	330.00	270.00	255.00
13	CITY OF SAN DIEGO, CA	COLLECTOR TREATMENT	145	3.0	90.0	7.0			175.00	200.00
14	CITY & CTY OF SAN FRAN	STORM COLLECTOR TREATMENT	93						250.00	300.00
15	CITY OF SAN JOSE DEPT	TREATMENT ONLY	116	2.0	59.0	39.0	250.00	250.00		
17	SANITATION DISTRICTS O	INTERCEPTOR TREATMENT	502	4.0	62.0	34.0	514.00	207.00		
18	CITY OF COLORADO SPRIN	COLLECTOR TREATMENT	30	4.0	86.0	10.0			282.00	178.00
19	METRO DENVER SEWERAGE D	INTERCEPTOR TREATMENT	150	20.0	55.0	25.0		215.00		
20	THE METROPOLITAN DISTR	COLLECTOR TREATMENT	64	20.0	46.5	33.5	206.00	204.00	84.00	85.00
21	WATER & SEWER UTILITY	STORM COLLECTOR TREATMENT	299						135.00	150.00
22	CITY OF JACKSONVILLE,	COLLECTOR TREATMENT	56	46.5	22.2	31.3	250.00	250.00	125.00	125.00
23	MIAMI-DADE WATER & SEW	INTERCEPTOR TREATMENT	244	20.0	75.0	5.0	140.00	140.00	120.00	120.00
24	ORANGE CTY PUB UTILITI	COLLECTOR TREATMENT	14	20.0	70.0	10.0			200.00	180.00
26	ESCAMBIA CTY UTIL AUTH	COLLECTOR TREATMENT	16	10.0	70.0	20.0	250.00	220.00		
27	DEPT OF SAN SEWERS, CI	COLLECTOR TREATMENT	51	16.4	49.1	34.5	312.00	210.00	228.00	159.00

RPT2

SECTION A (CONT'D)—SERVICE LEVEL

ID	NAME	9 LEVEL OF SERVICE	6 AVG. DAILY INFLOW	11 I/I %	11 RES. FLOW %	12 COMM &IND %	12 WASTE WATER BOD MG/L	12 WASTE WATER SS MG/L	12 INCLUDING I/I BOD MG/L	INCLUDING I/I SS MG/L
28	CITY OF ATLANTA-BUREAU	TREATMENT ONLY	156	4.0	53.0	43.0	200.00	200.00	200.00	200.00
29	DIVISION OF WASTEWATER	COLLECTOR TREATMENT	103	21.0	51.0	28.0	200.00	200.00		
31	MSD OF GREATER CHICAGO	INTERCEPTOR TREATMENT	1358	7.0	69.0	20.0			119.00	168.00
32	SANITARY DISTRICT OF R	INTERCEPTOR TREATMENT	35				200.00	250.00		
33	PUBLIC WORKS, INDIANAP	COLLECTOR TREATMENT	184	44.8	24.7	30.5	71516.00	92516.00	76933.00	99999.00
34	DEPT OF WATER & POLL C	STORM COLLECTOR TREATMENT	38	0.4	55.0	45.0			239.00	178.00
35	LOUISVILLE AND JEFFERS	STORM COLLECTOR TREATMENT	103	25.0	26.0	42.0	1.82	1.94	1.19	1.44
36	SEWERAGE & WATER OF NE	COLLECTOR TREATMENT	90							
37	CITY OF BALTIMORE, DPW	COLLECTOR TREATMENT	210	31.0	56.5	12.5			251.00	219.00
38	ANNE ARUNDEL COUNTY, D	COLLECTOR TREATMENT	26		76.0	24.0			200.00	200.00
41	UPPER BLACKSTONE WATER	TREATMENT ONLY	31	12.0	78.0	10.0	140.00	160.00	114.00	140.00
44	DETROIT SEWER & WATER	INTERCEPTOR TREATMENT	693	20.0	60.0	20.0	275.00	350.00		
47	WESTERN LAKE SUPERIOR	INTERCEPTOR TREATMENT	37	25.0	35.0	40.0			130.00	150.00
48	METROPOLITAN WASTE CON	INTERCEPTOR TREATMENT	274	10.0	60.0	30.0	200.00	220.00	180.00	200.00
49	POLL. CONTROL DEPT., K	COLLECTOR TREATMENT	100	8.0	60.0	32.0	180.00	180.00	165.00	165.00
50	METRO ST. LOUIS SEWER	STORM COLLECTOR TREATMENT	300	32.0	39.0	29.0	220.00	245.00	150.00	165.00
51	CITY OF OMAHA - ENVIRO	TREATMENT ONLY	70	22.0	39.0	39.0	240.00	300.00		
52	THE OCEAN COUNTY UTILI	INTERCEPTOR TREATMENT	33	13.0	80.0	7.0	250.00	250.00		
54	BERGEN COUNTY UTILITES	INTERCEPTOR TREATMENT	55	26.0	59.0	15.0	200.00	240.00		
55	PASSAIC VALLEY SEWERAG	INTERCEPTOR TREATMENT	205	21.0	29.2	49.8			184.00	307.00
57	PUBLIC WORKS DEPT., CU	STORM COLLECTOR TREATMENT	43	6.0	89.0	5.0	200.00	200.00	190.00	190.00
60	BUFFALO SEWER AUTHORIT	STORM COLLECTOR TREATMENT	160		85.0	15.0				
64	IPONDEQUOIT PURE WATER	OTHER TREATMENT	74	71.4		28.6			128.00	142.00
68	MSD OF GREATER CINCINN	COLLECTOR TREATMENT	179	40.0	30.0	30.0			240.00	300.00

RPT2

SECTION A (CONT'D)—SERVICE LEVEL

ID	NAME	9 LEVEL OF SERVICE	6 AVE. DAILY INFLOW	11 I/I %	11 RES. FLOW %	11 COMM &IND %	12 WASTE WATER BOD MG/L	12 WASTE WATER SS MG/L	12 INCLUDING I/I BOD MG/L	INCLUDING I/I SS MG/L
69	NE OHIO REGIONAL SEWER	INTERCEPTOR TREATMENT	280	52.0	25.0	23.0	120.00	214.00		
70	CITY OF COLOMBUS, DIV.	INTERCEPTOR TREATMENT	149	35.0	52.5	12.5			250.00	300.00
71	CITY OF DAYTON, OH	STORM COLLECTOR TREATMENT	57	31.0	44.0	25.0	350.00	350.00	260.00	280.00
72	CITY OF TOLEDO DEPT OF	COILECTOR TREATMENT	105	48.0	24.0	28.0	335.00	303.00	183.00	142.00
73	CITY OF TULSA WATER &	COLLECTOR TREATMENT	73				170.00	160.00		
74	UNIFIED SEWERAGE DISTR	COLLECTOR TREATMENT	30	16.0	80.0	4.0	168.00	217.00	160.00	181.00
76	CITY OF PHILADELPHIA W	STORM COLLECTOR TREATMENT	438				210.00	330.00	150.00	225.00
78	NARRAGANSETT BAY COMMI	INTERCEPTOR TREATMENT	45	41.0	22.0	37.0			200.00	175.00
79	CITY OF CHATTANOOGA, I	COLLECTOR TREATMENT	39	36.2	22.6	41.2			300.00	400.00
81	CITY OF MEMPHIS, TN	COLLECTOR TREATMENT	149	10.0	54.0	36.0	250.00	300.00	250.00	300.00
82	METRO GOV'T OF NASPVIL	TREATMENT ONLY					300.00	325.00		
83	TRINITY RIVER AUTHORIT	INTERCEPTOR TREATMENT	82	5.0	85.0	10.0	200.00	200.00	190.00	190.00
84	DALLAS WATER UTILITIES	COLLECTOR TREATMENT	180	17.0	29.0	54.0			250.00	250.00
85	EL PASO WATER UTILITES	TREATMENT ONLY	52	2.5	50.0	47.5			300.00	300.00
86	FORT WORTH WATER DEPT,	COLLECTOR TREATMENT	119		24.0	12.0	0.00	0.00	210.00	240.00
89	CITY OF SAN ANTONIO, W	COLLECTOR TREATMENT	132	17.1	41.4	31.5	250.00	250.00		
90	SALT LAKE CITY DEPT. P	COLLECTOR TREATMENT	40		77.0	23.0			108.00	123.00
92	FAIRFAX CTY - DEPT PUB	COLLECTOR TREATMENT	33	30.0						
93	HAMPTON ROADS SANITATI	INTERCEPTOR TREATMENT	115	150.0	90.0	10.0			200.00	180.00
94	MUNICIPALITY OF METRO.	INTERCEPTOR TREATMENT	158	36.0	52.0	12.0	300.00	400.00		
95	CITY OF TACOMA SEWER U	COLLECTOR TREATMENT	25	44.5	32.9	22.6	200.00	225.00	200.00	225.00
96	GREEN BAY MSD, WI	INTERCEPTOR TREATMENT	36	32.0	68.0				200.00	200.00
97	MADISON METROPOLITAN S	INTERCEPTOR TREATMENT	40	10.0	60.0	30.0	220.00	220.00	118.00	138.00
98	MILWAUKEE METROPOLITAN	INTERCEPTOR TREATMENT	222	37.0	31.0	32.0	310.00	370.00	200.00	250.00

RPT2

SECTION A (CONT'D)-SERVICE LEVEL

ID	NAME	9 LEVEL OF SERVICE	6 AVE. DAILY INFLOW	11 I/I %	11 RES. FLOW %	11 COMM &IND %	12 WASTE WATER BOD MG/L	12 WASTE WATER SS MG/L	12 INCLUDING I/I BOD MG/L	INCLUDING I/I SS MG/L
99	EMCINA WATER POLL. CON	TREATMENT ONLY	18	1.5	93.5	5.0	209.00	236.00	224.00	252.00
100	THORN CREEK BASIN SAN.	INTERCEPTOR TREATMENT	11	12.5	66.7	20.8	200.00	250.00		
101	DOWNERS GROVE SAN DIST	COLLECTOR TREATMENT	11	26.0	69.0	5.0	300.00	350.00	300.00	350.00
102	SANITARY DISTRICT OF E	INTERCEPTOR TREATMENT	17	25.0	59.0	16.0	200.00	250.00	150.00	170.00
104	SPRINGFIELD SANITARY D	INTERCEPTOR TREATMENT	30	55.0	35.0	10.0	200.00	250.00	100.00	125.00
107	CLACKAMAS COUNTY SERVI	COLLECTOR TREATMENT	6	40.0	44.0	16.0	314.00	316.00	123.00	124.00
109	PEPPER'S FERRY REG WAS	TREATMENT ONLY		33.0	37.0	30.0	250.00	250.00	220.00	200.00
110	LITTLE BLUE VALLY SEWE	INTERCEPTOR TREATMENT	30	33.0	54.0	13.0				

RPT3

SYSTEM WIDE LEVEL OF TREATMENT

SECTION A—QUESTION 10

ID #	PRIMARY # OF PLANTS	PRIMARY DESIGN CAPACITY	PRIMARY % TOTAL OF FLOW	SECONDARY DESIGN PLANTS	SECONDARY DESIGN CAPACITY	SECONDARY % TOTAL OF FLOW	TERTIARY # OF PLANTS	TERTIARY DESIGN CAPACITY	TERTIARY % TOTAL OF FLOW	OTHER # OF PLANTS	OTHER DESIGN CAPACITY	OTHER % TOTAL OF FLOW
1				9	136	100.0						
2	1	34	92.0	1	2	5.0	1	1	3.0			
3				2	160	100.0						
4				6	56	93.7				10	4	6.3
5				2	42	100.0						
6				4	12	100.0						
7	1	4	12.0				2	36	88.0			
8	1	180	75.0	1	60	25.0				0	0	0.0
9				4	510	100.0						
10				1	45	100.0						
11	1	290	100.0	1	168	100.0				1	60	
13	1	180	100.0									
14	2	195	28.0	1	142	72.0						
15	1	143	100.0	1	143	100.0	1	143	100.0			
17	1	171	31.0	3	222	40.1	7	160	28.9	0	0	0.0
18				1	36	100.0				0	0	0.0
19				1	210	100.0						
20				4	80	100.0						
21							1	309	100.0			
22				4	60	100.0						
23				4	276	99.7	1	1	0.3			
24				11	2	5.0	4	25	95.0			
26				7	5	20.0	1	20	80.0			
27							1	60	100.0	0	0	0.0
28				3	156	82.0	1	40	18.0	0	0	0.0
29	3	109	84.0	14	21	16.0						
31				4	1889	94.0	3	114	6.0			
32				1	60	100.0						
33	2	445	100.0	2	245	95.0	2	245	95.0			
34	2	65	110.0	1	55	70.0						
35					105	95.6		5	4.4			
36				3	135	100.0						
37	2	320	100.0	2	340	100.0						
38	1	15	37.0	6	22	63.0						
41				1	56	100.0						
44		192	20.0	1	805	80.0						
47				1	43	100.0						
48				11		96.0	2		4.0			
49	1	85	61.0	6	55	39.0						
50	1	248	54.0	34	215	46.0						
51				2	100	100.0						
52				3	72	100.0						
54				1	75	100.0						
55				1	330	100.0						
57	0			1	47	100.0						
60				1	180	100.0						
64	1	1	0.1	3	172	99.9						
68				22	180	99.0	8	1	1.0			
69				3	357	88.0	1	60	12.0	0	0	0.0
70				2	190	100.0						
71				1	72	100.0						
72				1	100	100.0						
73				3	70	104.0						

RPT3

SYSTEM WIDE LEVEL OF TREATMENT

SECTION A—QUESTION 10

ID #	PRIMARY # OF PLANTS	PRIMARY DESIGN CAPACITY	PRIMARY % TOTAL OF FLOW	SECONDARY # OF PLANTS	SECONDARY DESIGN CAPACITY	SECONDARY % TOTAL OF FLOW	TERTIARY # OF PLANTS	TERTIARY DESIGN CAPACITY	TERTIARY % TOTAL OF FLOW	OTHER # OF PLANTS	OTHER DESIGN CAPACITY	OTHER % TOTAL OF FLOW
74				4	10	23.0	2	35	87.0			
76				3	540	100.0						
78				1	64	100.0						
79				1	65	100.0						
81				2	215	100.0						
82				3	13	10.0	4	122	90.0			
83							1	100	100.0			
84							2	180	100.0			
85				3	51	88.0				1	10	12.0
86							1	96	100.0			
89				5	132	100.0						
90				1	45	100.0						
92												
93	1	27	9.0	8	153	91.0						
94	4	138	65.0	1	72	40.0						
95	3	40	100.0									
96				1	52	100.0						
97							1	50	100.0			
98				2	360	100.0						
99				1	23	100.0						
100										0	0	0.0
101							1	12	100.0			
102							1	10	100.0			
104				2	7	22.0	1	25	78.0			
107							2	30	100.0			
109				1	10	100.0						
110				1	9	100.0						
				1	40	133.0						

RPT4

REVENUE GENERATION
NUMBERS IN PERCENT'S
SECTION B—QUESTION 1

ID #	TOTAL REVENUE OM$	TOTAL REVENUE CAP$	USER CHG OM%	USER CHG CAP%	AD VALOREM OM%	AD VALOREM CAP%	SPEC LEV OM%	SPEC LEV CAP%	HOOKUP FEE OM%	HOOKUP FEE CAP%	FED GRANT OM%	FED GRANT CAP%	STATE GRANT OM%	STATE GRANT CAP%	OTHER OM%	OTHER CAP%
1	12,000,000	12,000,000	90.0						9.0						1.0	
2	11,934,334	10,487,441	99.8	48.7					0.2							51.3
3	26,546,104		62.0												38.0	100.0
4	15,555,959	5,952,919	100.0							100.0						
5	8,000,000	7,000,000	99.0						1.0							75.0
6			99.0	100.0					1.0							
7	5,570,537	6,975,326	74.0	2.0	20.0	51.0						23.0			6.0	20.0
8	26,464,000	28,869,000	20.8	12.7	67.8	5.5				18.9		0.4		0.1	11.4	62.4
9	50,600,000	136,400,000	82.4	33.1			11.3	0.6		6.4		56.8			6.3	3.1
10	18,813,706	11,141,253	75.9	0.0	0.0	33.5	17.7		0.0	18.6					6.4	47.9
11	27,500,000	13,500,000	84.0	100.0	5.0				2.0	0.0					9.0	
13	45,249,000	14,765,000	100.0							66.6		28.8				4.6
14	45,000,000	31,300,000	57.8	72.8											42.2	27.2
15	22,534,600	18,930,200	90.0	57.9						32.6		0.4			10.0	9.1
17	63,873,000	66,959,000	54.7	11.6	27.7				0.0	18.6		45.5		7.6	17.6	16.7
18	13,179,054	5,291,340	100.0							70.0		30.0				
19	31,617,000	13,893,000	76.0	0.0						61.0					24.0	39.0
20	13,575,400	5,025,972	12.0	12.0	70.0	70.0	6.0	6.0							12.0	12.0
21	34,081,300	19,051,846	100.0	15.3								29.0				55.7
22	22,847,243	15,871,506	100.0	99.9						0.1						
23	33,455,000	18,791,000	97.0	64.0						10.0		26.0	0.0		3.0	
24	18,608,000		96.2												3.8	
26	10,440,279	3,118,525	95.0	95.0					5.0	5.0						
27	19,908,000	27,465,000	81.0	28.0				3.6	9.0	3.6	3.0	29.2			7.0	35.6
28			100.0													
29	29,702,000	8,958,000	97.0	46.0		51.0					0.0	3.0				
31	163,689,000	81,711,000	15.0		63.0	100.0									22.0	
32			100.0			65.0				3.0		32.0				
33	42,288,000	11,292,000	97.0			100.0									3.0	
34	7,858,367		99.8				0.1		0.1						10.0	
35	26,400,000	22,700,000	93.0	30.0				3.0		1.0					6.0	24.0
36			66.0	34.0												
37	49,641,422	5,064,390	100.0	27.0								50.0		8.0		15.0
38	26,867,617	19,956,898	87.0	72.0											13.0	28.0
41	2,768,000	256,000					100.0	100.0								
44																
47	7,659,000	3,243,000	100.0	100.0												
48	55,776,000	28,786,000	90.3	74.1						25.9					9.7	
49	12,742,700	5,000,000	100.0	30.0							50.0			20.0		
50	33,426,000	23,495,000	77.0	11.0	14.0	41.0			2.0	10.0	2.0	4.0			5.0	34.0
51	19,365,459	8,948,600	92.6									88.3		11.7	7.4	
52			71.0								8.0		2.0			
54			100.0	100.0												
55	40,237,385	9,704,709	99.0	99.9								0.1			10.0	
57	10,252,050	17,682,964	99.6	46.4					0.4	8.4		22.6		22.6		
60	31,572,000		64.0		20.0		1.0						8.0		7.0	
64	14,694,167	12,677,648	64.0			50.0	17.0						6.0		13.0	47.0
68	36,494,500	24,936,265	100.0	92.3				0.2		1.3		6.2				
69	50,675,779	30,478,000	98.0	32.0								64.0			2.0	
70	34,044,755	18,618,225	84.9	82.1					0.7	17.9					14.4	
71	11,930,000		100.0	100.0												
72	18,363,000	8,365,000	93.0	50.6					7.0	30.2					6.3	19.2

RPT4

REVENUE GENERATION
NUMBERS IN PERCENT'S
SECTION B—QUESTION 1

ID #	TOTAL REVENUE O&M$	TOTAL REVENUE CAP$	USER CHG O&M%	USER CHG CAP%	AD VALOREM O&M%	AD VALOREM CAP%	SPEC LEV O&M%	SPEC LEV CAP%	HOOKUP FEE O&M%	HOOKUP FEE CAP%	FED GRANT O&M%	FED GRANT CAP%	STATE GRANT O&M%	STATE GRANT CAP%	OTHER O&M%	OTHER CAP%
73	17,690,919	13,367,401	92.5	19.1		7.5		28.2				35.3			7.5	9.9
74	12,000,000	4,500,000	100.0			50.0				50.0						
76																
78	9,900,000		99.8	10.0			0.1		0.1			75.0		15.0		
79		15,050,370	100.0	98.0												2.0
81	33,659,000	30,121,000	89.0	100.0					2.0						9.0	
82	68,634,421	25,754,337	80.0	100.0											20.0	
83	11,000,000	8,000,000	90.0	90.0											10.0	10.0
84	32,758,000	28,019,000	92.2	72.3											7.8	24.7
85	13,900,000		100.0	75.0						15.0						
86	19,000,000	8,500,000	100.0	100.0					1.8	1.8						
89	63,000,000	157,400,000	86.0	14.9				3.8				9.5			14.0	71.8
90	5,060,671	8,233,319	100.0	84.4						14.3						1.4
92	48,183,876	24,624,408	81.5						0.3	100.0					18.2	
93	55,044,123	55,044,123	75.0	8.0		0.0		0.0	16.0	16.0					9.0	9.0
94	66,221,920	29,541,650	74.7		1.4		0.0				0.2	3.7		96.4	23.7	
95	9,669,195	1,312,066	95.0	100.0											5.0	
96	14,400,122		100.0	100.0												
97	5,600,000	8,300,000	93.0	23.0						4.0		1.0		57.0	7.0	15.0
98	46,700,000	276,677,000	85.6	3.8		25.0						31.1		23.0	14.4	17.1
99	4,035,027	2,525,780	98.0							92.0		6.0		2.0	2.0	
100	1,859,958	791,797	92.0	36.0		43.0				1.0		4.0			8.0	16.0
101	2,202,333	1,997,303	93.0			42.0				24.0		5.0			7.0	29.0
102	2,600,000	7,733,000	74.0			3.0				3.0			84.0		26.0	10.0
104	2,290,000	1,411,000	45.0	38.0	40.0				1.0	10.0					14.0	48.0
107	1,952,819	481,972	95.0			100.0									5.0	
109		2,276,720										78.0				22.0
110	2,035,770	3,922,010	100.0	100.0												

RPT5

OTHER REVENUE
SECTION B—QUESTION 1 (CONT'D)

ID	AGENCY NAME	OM%	CAP%	DESCRIPTION
1	JEFFERSON COUNTY PUBLIC WORKS, AL	1.0		
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK		51.3	INTEREST INCOME
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	38.0	100.0	OTHER CHARGES
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ			
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR		75.0	BOND ISSUE
6	PINE BLUFF WASTEWATER UTILITY, AR			
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	6.0	20.0	INTEREST
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	11.4	62.4	INTEREST/MISC
9	CITY OF LOS ANGLE - DPW, CA	6.3	3.1	
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	6.4	47.9	INTEREST
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	3.9		INTEREST, FEES, & COMPOST SALES
13	CITY OF SAN DIEGO, CA		4.6	
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	42.2	27.2	INTEREST & SURPLUS
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	10.0	9.1	
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	17.6	16.7	INTEREST & RESERVES
18	CITY OF COLORADO SPRINGS, CO			
19	METRO DENVER SEWERAGE DISPOSAL DIST #	24.0	39.0	INVESTMENT INCOME
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	12.0	12.0	
21	WATER & SEWER UTILITY ADMINISTRATION, DC		55.7	BORROWED BY BONDS
22	CITY OF JACKSONVILLE, FL			
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	3.0		SPECIAL CUSTOMER CHARGE
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	3.8		
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.			
27	DEPT OF SAN SEWERS, CITY OF TAMPA	7.0	35.6	BOND & INTEREST
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA			
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI			
31	MSD OF GREATER CHICAGO, IL	22.0		SLUDGE SALES, LAND RENTAL, INVEST INCOME
32	SANITARY DISTRICT OF ROCKFORD, IL			
33	PUBLIC WORKS, INDIANAPOLIS IN	3.0		
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	10.0		INTEREST & FEES
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	6.0	24.0	INTEREST
36	SEWERAGE & WATER OF NEW ORLEANS, LA			
37	CITY OF BALTIMORE, DPW, MD		15.0	LOCAL
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	13.0	28.0	REIMBURSEMENTS, INVESTMENTS
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA			
44	DETROIT SEWER & WATER DEPT., MI			
47	WESTERN LAKE SUPERIOR SAN. DIST. MN			
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	9.7		
49	POLL. CONTROL DEPT., KANSAS CITY, MO.			
50	METRO ST. LOUIS SEWER DIST	5.0	34.0	INTEREST
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	7.4		
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ			
54	BERGEN COUNTY UTILITES AUTHORITY, NJ			
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	10.0		
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM			
60	BUFFALO SEWER AUTHORITY, NY	7.0		
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	13.0	47.0	EARNINGS
68	MSD OF GREATER CINCINNATI, OH			
69	NE OHIO REGIONAL SEWER DISTRICT, OH	2.0		
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	14.4		
71	CITY OF DAYTON, OH			
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	6.3	19.2	INTEREST
73	CITY OF TULSA WATER & SEWER DEPT., OK	7.5	9.9	INTEREST, BONDS
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR			
76	CITY OF PHILADELPHIA WATER DEPT			
78	NARRAGANSETT BAY COMMISSION			

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OTHER REVENUE
SECTION B—QUESTION 1 (CONT'D)

ID	AGENCY NAME	OM%	CAP%	DESCRIPTION
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN		2.0	
81	CITY OF MEMPHIS, TN	9.0		
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	20.0		
83	TRINITY RIVER AUTHORITY OF TEXAS	10.0	10.0	
84	DALLAS WATER UTILITIES, TX	7.8	24.7	INTEREST & MISC FEES
85	EL PASO WATER UTILITES, TX			
86	FORT WORTH WATER DEPT, TX			
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	14.0	71.8	INTEREST
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT		1.4	
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT	18.2		
93	HAMPTON ROADS SANITATION DISTRICT, VA	9.0	9.0	INTEREST
94	MUNICIPALITY OF METRO. SEATTLE, WA	23.7		INTEREST
95	CITY OF TACOMA SEWER UTILITY, WA	5.0		
96	GREEN BAY MSD, WI			
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	7.0	15.0	INTEREST, METROGRO SALES, BOND PROCEEDS
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	14.4	17.1	MILORGANTIE SALES, INTEREST, BOND PROCEEDS
99	ENCINA WATER POLL. CONTROL FACILITY, CA	2.0		INTEREST
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	8.0	16.0	INTEREST
101	DOWNERS GROVE SAN DIST, IL	7.0	29.0	INTEREST
102	SANITARY DISTRICT OF ELGIN, IL	26.0	10.0	INTEREST
104	SPRINGFIELD SANITARY DISTRICT, IL	14.0	48.0	REV SHARING & INTEREST
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	5.0		
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA		22.0	BONDS
110	LITTLE BLUE VALLY SEWER DISTRICT, MO			

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ANNUAL O&M EXPENDITURES SECTION B—QUESTIONS 2, 3, 4, & 5

IN DOLLARS

ID	NAME	OM EXP 1983	OM EXP 1984	OM EXP 1985	OM BUDGET 1986	DEBT SERV OUTSTAND	TREAT COST PER MGAL
1	JEFFERSON COUNTY PUBLIC WORKS,		9,500,	11,000,000	10,920,000	60,000,000	287
2	ANCHORAGE WATER & WASTEWATER U	9,819,0	10,891,	11,934,334	12,522,580	61,000,000	1,055
3	CITY OF PHOENIX WATER & WASTEW	11,762,2	12,855,	16,328,506	18,807,552		315
4	PIMA COUNTY WASTEWATER MANAGEM	13,095,0	13,820,	15,671,861	16,279,592	35,532,381	914
5	CITY OF LITTLE ROCK WASTEWATER	4,465,1	5,278,	5,545,357	5,828,699	16,115,000	422
6	PINE BLUFF WASTEWATER UTILITY,	1,300,0	1,400,	1,500,000	1,600,000	250,000	457
7	CHINO BASIN MUNICIPAL WATER DI	4,417,:	4,666,	4,690,368	5,156,325	3,471,923	428
8	COUNTY SANITATION DISTRICTS OF		16,723,	19,860,000	30,800,000	6,151,000	234
9	CITY OF LOS ANGLE - DPW, CA	28,241,9	31,881,	38,015,600	56,009,000	19,310,000	222
10	CENTRAL CONTRA COSTA SANITARY	15,043,2	15,867,	16,342,753	18,472,057	3,490,000	690
11	EAST BAY MUNICIPAL UTILITY DIS	15,600,0	16,500,	19,400,000	27,500,000	5,440,000	664
13	CITY OF SAN DIEGO, CA	37,783,0	39,503,	46,511,000	51,912,100	30,000,000	879
14	CITY & CTY OF SAN FRANCISCO, C	33,648,0	33,048,	37,468,000	45,000,000	231,695	1,104
15	CITY OF SAN JOSE DEPT WATER PO	19,542,6	19,963,	24,034,800	26,257,000	98,135,000	568
17	SANITATION DISTRICTS OF LOS AN	42,941,0	47,379,	51,817,000	63,873,000	10,074,000	283
18	CITY OF COLORADO SPRINGS, CO	8,595,5	9,407,	11,174,249	11,578,029	16,741,462	1,020
19	METRO DENVER SEWERAGE DISPOSAL	12,569,9	16,176,	17,228,234	19,438,761	139,760,000	315
20	THE METROPOLITAN DISTRICT, HAR	10,349,7	11,852,	12,710,175	15,240,523	37,216,720	544
21	WATER & SEWER UTILITY ADMINIST	32,975,5	36,793,	34,081,300	75,000,000	279,904,000	312
22	CITY OF JACKSONVILLE, FL	18,471,2	19,992,	19,763,356	21,142,748	79,961,551	967
23	MIAMI-DADE WATER & SEWER AUTHO	26,798,0	30,634,	33,455,000	37,204,000	70,751,000	376
24	ORANGE CTY PUB UTILITIES, ORLA	5,338,9	6,793,	8,305,244	10,209,960	71,625,000	1,591
26	ESCAMBIA CTY UTIL AUTH, PENSAC	6,551,9	7,066,	7,541,063	8,576,528	71,885,000	1,291
27	DEPT OF SAN SEWERS, CITY OF TA	16,519,2	18,853,	19,416,600	21,200,700	170,027,200	1,043
28	CITY OF ATLANTA-BUREAU OF POLL	12,832,0	13,447,	13,785,000	16,469,000	81,380,000	243
29	DIVISION OF WASTEWATER MGT, DP	22,054,0	23,170,	27,332,000	31,015,000	56,598,110	727
31	MSD OF GREATER CHICAGO, IL	134,560,0	136,800,	135,560,000	102,060,000	245,400,000	273
32	SANITARY DISTRICT OF ROCKFORD,	6,200,1	6,380,	6,745,064	7,628,854	4,300,000	528
33	PUBLIC WORKS, INDIANAPOLIS IN	35,668,2	39,760,	37,411,532	40,986,772	113,334,000	551
34	DEPT OF WATER & POLL CONTROL,	2,343,0	2,404,	2,368,741	2,838,186	8,909,110	171
35	LOUISVILLE AND JEFFERSON COUNT	23,000,0	24,300,	26,000,000	26,100,000	56,700,000	692
36	SEWERAGE & WATER OF NEW ORLEAN	19,524,8	21,643,	21,145,985	28,317,465	20,615,000	644
37	CITY OF BALTIMORE, DPW, MD	26,804,0	28,673,	32,167,910	37,582,917	22,049,000	420
38	ANNE ARUNDEL COUNTY, DEPT OF U	19,281,9	22,709,	26,677,238	29,269,990	160,860,077	2,812
41	UPPER BLACKSTONE WATER POLL. A	1,937,9	2,252,	2,279,674	2,474,800	600,000	201
44	DETROIT SEWER & WATER DEPT., M	113,109,9	110,819,	105,591,752	109,532,500	191,852,491	417
47	WESTERN LAKE SUPERIOR SAN. DIS	7,845,5	7,626,	7,389,719	7,659,000	22,910,000	547
48	METROPOLITAN WASTE CONTROL COM	50,395,0	53,862,	55,776,000	64,730,000	187,000,000	558
49	POLL. CONTROL DEPT., KANSAS CI	9,700,0	10,400,	11,300,000	12,400,000	33,625,000	310
50	METRO ST. LOUIS SEWER DIST	34,410,0	37,123,	34,350,000	42,826,000	48,909,000	314
51	CITY OF OMAHA - ENVIRONMENTAL S	11,310,2	12,832,	13,234,723	15,034,412	27,653,086	518
52	THE OCEAN COUNTY UTILITIES AUT				11,587,000	236,445,000	
54	BERGEN COUNTY UTILITES AUTHORI	12,485,3	11,813,	12,578,000	13,931,400	5,592,642	627
55	PASSAIC VALLEY SEWERAGE COMMIS	33,363,2	38,652,	35,513,532	41,374,177	90,045,000	475
57	PUBLIC WORKS DEPT., CUSTOMER S	7,092,3	8,482,	8,426,977	10,393,842	95,650,000	113
60	BUFFALO SEWER AUTHORITY, NY	22,407,0	22,448,	24,763,000	26,807,000	86,585,000	
64	IRONDEQUOIT PURE WATERS DISTRI	1,351,3	1,133,	1,616,730	3,837,057	1,630,850	60
68	MSD OF GREATER CINCINNATI, OH	31,858,7	35,530,	36,494,100	41,585,200	84,664,800	569
69	NE OHIO REGIONAL SEWER DISTRIC	34,356,5	35,843,	40,408,035	48,975,139	109,138,094	397
70	CITY OF COLOMBUS, DIV. OF SEWE	23,761,0	26,626,	29,776,175	29,063,909	162,607,551	548
71	CITY OF DAYTON, OH	2,041,3	2,240,	2,421,178	315,600	1,350,000	116
72	CITY OF TOLEDO DEPT OF PUB UTI	13,222,0	13,863,	14,457,000	15,755,000	32,359,865	377
73	CITY OF TULSA WATER & SEWER DE	10,119,2	11,948,	13,546,953	18,066,595	28,688,413	508

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ANNUAL OEP EXPENDITURES SECTION B—QUESTIONS 2, 3, 4, & 5

IN DOLLARS

ID	NAME	OM EXP 1983	OM EXP 1984	OM EXP 1985	OM BUDGET 1986	DEBT SERV OUTSTAND	TREAT COST PER MGAL
74	UNIFIED SEWERAGE DISTRICT OF W	9,900,0	10,600,	11,600,000	33,000,000	35,472,000	1,059
76	CITY OF PHILADELPHIA WATER DEP	53,753,0	56,114,	69,319,000	82,801,000	720,858,455	434
78	NARRAGANSETT BAY COMMISSION	5,012,6	5,537,	7,214,025	7,575,669	5,485,000	439
79	CITY OF CHATTANOOGA, INTERCEPT	1,498,0	4,327,	6,133,560	6,526,928	72,100,000	431
81	CITY OF MEMPHIS, TN	17,515,0	18,126,	17,550,000	18,574,046	81,521,397	323
82	METRO GOV'T OF NASHVILLE/DAVID	28,561,6	31,296,	33,442,212	43,200,000	217,121,000	318
83	TRINITY RIVER AUTHORITY OF TEX	9,200,0	10,000,	11,000,000	11,500,000	8,100,000	368
84	DALLAS WATER UTILITIES, TX	27,985,0	30,457,	33,636,000	36,400,000	271,111,000	515
85	EL PASO WATER UTILITES, TX		5,266,	5,733,037	7,762,422	23,000,000	303
86	FORT WORTH WATER DEPT, TX	8,012,6	7,289,	9,039,894	10,589,494	76,660,997	245
89	CITY OF SAN ANTONIO, WASTEWATE	19,995,0	20,544,	24,183,895	27,500,000	341,700,000	502
90	SALT LAKE CITY DEPT. PUBLIC UT	5,475,2	5,112,	5,060,671	6,127,992	7,552,375	347
92	FAIRFAX CTY - DEPT PUB WORKS -	5,076,2	5,993,	6,081,530	5,569,399	38,040,000	505
93	HAMPTON ROADS SANITATION DISTR	20,702,1	23,530,	25,828,543	29,966,376	114,835,000	615
94	MUNICIPALITY OF METRO. SEATTLE	18,559,4	18,978,	21,965,511	23,856,000	270,089,000	1,034
95	CITY OF TACOMA SEWER UTILITY,	6,767,2	7,090,	7,763,794	8,374,568	5,945,000	851
96	GREEN BAY MSD, WI	8,160,2	8,361,	8,541,205	9,321,007	16,350,000	650
97	MADISON METROPOLITAN SEWERAGE	4,100,0	4,600,	4,800,000	5,400,000	20,075,000	329
98	MILWAUKEE METROPOLITAN SEWERAG	42,620,0	42,041,	46,700,000	46,585,000	256,380,000	576
99	ESCINA WATER POLL. CONTROL FAC	3,200,0	3,700,	4,000,000	4,300,000		609
100	THORN CREEK BASIN SAN. DIST.,C	1,770,0	1,745,	1,958,702	2,297,005	1,525,000	468
101	DOWNERS GROVE SAN DIST, IL	1,668,7	1,733,	1,924,027	2,105,500	1,600,000	479
102	SANITARY DISTRICT OF ELGIN, IL	2,536,0	2,548,	2,656,000	2,800,000	650,000	428
104	SPRINGFIELD SANITARY DISTRICT,	2,055,0	2,066,	2,290,000	2,522,000	6,084,000	209
107	CLACKAMAS COUNTY SERVICE DISTR	1,612,9	1,676,	1,636,243	1,830,535	2,965,000	747
109	PEPPER'S FERRY REG WASTEWATER					9,400,000	585
110	LITTLE BLUE VALLY SEWER DISTRI	1,535,7	1,669,	1,862,407	3,521,660	32,755,000	171

TOTALS BY YEAR: 1983: 1,406,135,962 1984: 1,530,060,919 1985: 1,635,032,074 1986: 1,889,152,570

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RESIDENTIAL VOLUME & BILLING
SECTION C—QUESTIONS 1 & 2

ID	AGENCY NAME	100% METERED USE	POTENTIAL METERED USE	WINTER METERED USE	FLAT RATE	OTHER	RES. USER O&M FLAT CHARGE	RES. USER O&M VOLUME CHARGE
1	JEFFERSON COUNTY PUBLIC WORKS, AL		100.0					13.10
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK				100.0		187.20	
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ		62.0			38.0		37.24
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ			100.0			19.92	87.00
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	100.0						0.74
6	PINE BLUFF WASTEWATER UTILITY, AR			100.0				
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA					100.0	5.25	
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	100.0					26.40	
9	CITY OF LOS ANGLE - DPW, CA		90.0			10.0		39.70
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA				100.0		124.00	
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	27.0			73.0		53.04	21.24
13	CITY OF SAN DIEGO, CA				100.0		96.00	
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA		55.0					1.09
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA					100.0	107.81	
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA					100.0	23.00	
18	CITY OF COLORADO SPRINGS, CO			99.0	1.0			0.65
19	METRO DENVER SEWERAGE DISPOSAL DIST #	25.0			75.0		62.28	0.00
20	THE METROPOLITAN DISTRICT, HARTFORD, CT		2.0			98.0		80.00
21	WATER & SEWER UTILITY ADMINISTRATION, DC							162.10
22	CITY OF JACKSONVILLE, FL	75.0	25.0				8.85	197.00
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	100.0					28.08	48.00
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA		99.0			1.0	73.32	1.09
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.			100.0				
27	DEPT OF SAN SEWERS, CITY OF TAMPA	95.0				5.0		1.13
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	100.0						1.40
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI				100.0	0.0	123.00	
31	MSD OF GREATER CHICAGO, IL					100.0		237.32
32	SANITARY DISTRICT OF ROCKFORD, IL	95.0				5.0		91.00
33	PUBLIC WORKS, INDIANAPOLIS IN	98.0			2.0			1.13
34	DEPT OF WATER & POLL CONTROL, WICHITA KA			98.0		2.0	6.70	0.45
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	100.0					36.00	89.00
36	SEWERAGE & WATER OF NEW ORLEANS, LA	100.0						
37	CITY OF BALTIMORE, DPW, MD	100.0						0.99
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	87.0			13.0			
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA		100.0					75.00
44	DETROIT SEWER & WATER DEPT., MI	99.0				1.0		76.50
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	100.0					3.75	129.00
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	4.0		95.0	1.0			113.00
49	POLL. CONTROL DEPT., KANSAS CITY, MO.			99.0	1.0			
50	METRO ST. LOUIS SEWER DIST				100.0		51.56	
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE			100.0			41.90	41.44
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ				100.0		100.00	
54	BERGEN COUNTY UTILITES AUTHORITY, NJ					100.0		
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ					76.0		
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM			99.2	0.8			61.50
60	BUFFALO SEWER AUTHORITY, NY	16.0			84.0			
64	IPONDEQUOIT PURE WATERS DISTRICT, NY	100.0						55.00
68	MSD OF GREATER CINCINNATI, OH			100.0			54.00	61.50
69	NE OHIO REGIONAL SEWER DISTRICT, OH	100.0						76.96
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	98.5	0.2		0.4	1.0	54.04	69.99
71	CITY OF DAYTON, OH	100.0						0.75
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	25.0		75.0				1.01
73	CITY OF TULSA WATER & SEWER DEPT., OK			100.0			1.58	89.00
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR				100.0		129.00	

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RESIDENTIAL VOLUME & BILLING
SECTION C—QUESTIONS 1 & 2

ID	AGENCY NAME	100% METERED USE	POTENTIAL METERED USE	WINTER METERED USE	FLAT RATE	OTHER	RES. USER O&M FLAT CHARGE	RES. USER O&M VOLUME CHARGE
76	CITY OF PHILADELPHIA WATER DEPT		100.0				141.20	0.74
78	NARRAGANSETT BAY COMMISSION				100.0		50.00	
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	100.0						0.48
81	CITY OF MEMPHIS, TN	100.0						58.68
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	98.5	1.0			0.5		
83	TRINITY RIVER AUTHORITY OF TEXAS			100.0				34.00
84	DALLAS WATER UTILITIES, TX			100.0	26.6	53.0	26.64	53.00
85	EL PASO WATER UTILITES, TX			100.0				
86	FORT WORTH WATER DEPT, TX			100.0				4.10
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX			95.0	5.0		136.20	1.37
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT			100.0				45.00
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT	4.9		94.8		0.3		2.02
93	HAMPTON ROADS SANITATION DISTRICT, VA	98.9			1.1		0.00	0.82
94	MUNICIPALITY OF METRO. SEATTLE, WA					100.0	1.70	2.13
95	CITY OF TACOMA SEWER UTILITY, WA			100.0				
96	GREEN BAY MSD, WI			100.0				26.70
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	99.7			0.3		23.97	38.56
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI			100.0			26.96	63.66
99	ENCINA WATER POLL. CONTROL FACILITY, CA	100.0					120.00	
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	98.0			2.0			76.00
101	DOWNERS GROVE SAN DIST, IL				7.0	93.0		90.00
102	SANITARY DISTRICT OF ELGIN, IL	98.0			2.0		60.00	55.00
104	SPRINGFIELD SANITARY DISTRICT, IL	99.4			0.6		12.00	43.00
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR				100.0		84.00	
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	95.0			5.0			0.58
110	LITTLE BLUE VALLY SEWER DISTRICT, MO							

RPT8

RESIDENTIAL (RETAIL) RATES
SECTION C—QUESTIONS 3, 4 & 5

ID	AGENCY NAME	EFFECTIVE	AVERAGE	AVERAGE	AVERAGE TOTAL	RESIDENTIAL
1	JEFFERSON COUNTY PUBLIC WORKS, AL		100.00			2.00
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK	03/15/1985	132.48	54.72	187.20	174.60
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	07/01/1985	27.75	18.35	46.10	2.00
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ	07/01/1985	67.28	1.73	69.01	19.92
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	09/01/1982	87.36			33.60
6	PINE BLUFF WASTEWATER UTILITY, AR		5.60	0.40	6.00	3.00
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA		43.50	19.50	63.00	46.80
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA		44.90	1.19	46.09	
9	CITY OF LOS ANGLE - DPW, CA		23.10	39.30	62.40	18.00
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	07/01/1985	124.00	41.00	165.00	124.00
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	07/01/1985	54.49	13.07	67.56	53.04
13	CITY OF SAN DIEGO, CA	07/01/1985	96.00			96.00
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	07/01/1985	58.00	44.00	102.00	
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	07/01/1985	107.81	16.99	124.80	72.00
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	07/01/1985	34.00			20.50
18	CITY OF COLORADO SPRINGS, CO	10/01/1984	118.00	13.00	131.00	6.90
19	METRO DENVER SEWERAGE DISPOSAL DIST #	01/01/1980	68.00	27.00	95.00	31.14
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	01/01/1986	140.00	36.40	176.40	
21	WATER & SEWER UTILITY ADMINISTRATION, DC	10/01/1985	142.00			
22	CITY OF JACKSONVILLE, FL	10/01/1986	150.10	104.30	254.40	105.60
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	10/01/1985	85.40	30.64	116.04	28.08
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	10/01/1985	203.97	153.87	357.84	128.64
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	02/01/1986	9.15	4.73	13.88	68.64
27	DEPT OF SAN SEWERS, CITY OF TAMPA	10/01/1985	102.33	46.47	148.80	
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	04/01/1985	151.00	22.00	173.00	
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI	07/01/1984	113.00	47.00	160.00	86.40
31	MSD OF GREATER CHICAGO, IL	01/01/1986	20.00	20.00	40.00	
32	SANITARY DISTRICT OF ROCKFORD, IL	05/01/1986	63.52	6.44	69.96	
33	PUBLIC WORKS, INDIANAPOLIS IN	01/01/1986	78.00	17.52	95.52	65.16
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	04/01/1986	45.00			6.70
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	07/01/1984	78.00	23.00	101.00	36.00
36	SEWERAGE & WATER OF NEW ORLEANS, LA	01/01/1986	129.17	66.55	195.72	43.02
37	CITY OF BALTIMORE, DPW, MD	04/01/1984	143.37	14.63	158.00	90.00
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	04/03/1983	110.00			34.00
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA	07/01/1986	84.00	4.21	88.21	10.00
44	DETROIT SEWER & WATER DEPT., MI	07/01/1985	90.20	33.36	123.56	34.80
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	01/01/1983	15.36			3.75
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	01/01/1986	59.66	22.69	82.35	47.00
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	05/01/1986	43.20	14.40	57.60	23.40
50	METRO ST. LOUIS SEWER DIST	07/01/0855	47.40	8.00	55.40	47.40
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	01/01/1986	71.66	19.83	91.49	49.20
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	01/01/1985				225.00
54	BERGEN COUNTY UTILITES AUTHORITY, NJ		68.00	27.00	95.00	
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	01/01/1986				
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM		55.27	57.48	112.75	57.48
60	BUFFALO SEWER AUTHORITY, NY	07/01/1985	108.50	32.09	140.59	108.00
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	01/01/1986	33.00	10.55	43.55	10.55
68	MSD OF GREATER CINCINNATI, OH	07/01/1985	83.44	33.00	116.44	67.80
69	NE OHIO REGIONAL SEWER DISTRICT, OH	01/01/1983	69.08	25.12	94.20	31.40
70	CITY OF COLUMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	01/16/1986	72.96	39.90	112.86	16.09
71	CITY OF DAYTON, OH	01/01/1986	56.37	9.95	66.32	41.00
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	01/01/1986	82.40	26.66	109.06	31.80
73	CITY OF TULSA WATER & SEWER DEPT., OK	06/01/1985	54.98	30.94	85.92	2.72
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR	06/01/1986	129.00	21.60	150.60	129.00

SECTION C—QUESTIONS 3, 4 & 5

		DATE OF RATE	RESIDENTIAL O&M BILL	RESIDENTIAL DEBT SERVICE/CAPITAL		CURRENT FIN BILL
76	CITY OF PHILADELPHIA WATER DEPT	01/10/1986	110.28	86.04	196.32	141.20
78	NARRAGANSETT BAY COMMISSION	07/01/1985	39.50	10.50	50.00	50.00
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	07/02/1985	28.68	107.04	135.72	51.12
81	CITY OF MEMPHIS, TN	07/01/1982	33.00	23.64	56.64	18.00
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	01/01/1986		127.96		2.95
83	TRINITY RIVER AUTHORITY OF TEXAS		76.20			28.68
84	DALLAS WATER UTILITIES, TX	10/01/1984	76.14	25.38	101.52	26.64
85	EL PASO WATER UTILITES, TX	03/01/1985	83.04			49.44
86	FORT WORTH WATER DEPT. TX	10/01/1985				49.20
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	06/03/1985	77.63	58.56	136.19	55.20
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT	01/01/1986	32.83	53.37	86.20	40.20
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT	07/01/1984	161.60			
93	HAMPTON ROADS SANITATION DISTRICT, VA	07/01/1982	50.40	21.60	72.00	32.80
94	MUNICIPALITY OF METRO. SEATTLE, WA	01/01/1986	123.00	6.00	129.00	20.40
95	CITY OF TACOMA SEWER UTILITY, WA	04/01/1986	94.46	17.55	112.01	54.12
96	GREEN BAY MSD, WI	04/01/1986	13.44	16.80	30.24	37.20
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	01/01/1986	54.00	30.00	84.00	42.50
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	01/01/1986	68.60	222.00	290.60	26.96
99	ENCINA WATER POLL. CONTROL FACILITY, CA	07/01/1985	120.00			36.00
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	06/01/1986	80.00	21.00	101.00	
101	DOWNERS GROVE SAN DIST, IL	05/01/1983	86.40	42.96	129.36	
102	SANITARY DISTRICT OF ELGIN, IL		38.50	7.00	45.50	
104	SPRINGFIELD SANITARY DISTRICT, IL	09/01/1980	43.00	27.00	70.00	12.00
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OF	07/01/1985	84.00	32.40	116.40	84.00
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	10/01/1986	60.00	120.00	180.00	75.00
110	LITTLE BLUE VALLY SEWER DISTRICT, MO					

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RATES BY PARAMETER
SECTION C—QUESTIONS 6 & 7

ID	AGENCY NAME	FLOWS (CENTS/1000 GALS.)	BOD/COD (CENTS/LB.)	SS (CENTS/LB.)	OTHER (CENTS/LB.)	OTHER (CENTS/LB.)	DEBT RETIRE	O&M
1	JEFFERSON COUNTY PUPLIC WORKS, AL	13.10	9.50	4.90				Y
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK						Y	
3	CITY OF PHOENIX WATER & WASTEWATER DEPT.	20.51	6.05	3.85				Y
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT.,	42.66	8.10	10.04			Y	
5	CITY OF LITTLE ROCK WASTEWATER UTILITY,	74.67	4.42	5.22	2.00		N	Y
6	PINE BLUFF WASTEWATER UTILITY, AR						Y	
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA				5.25			Y
8	COUNTY SANITATION DISTRICTS OF ORANGE CO	13.15	9.55	9.84			Y	
9	CITY OF LOS ANGLE - DPW, CA	61.10	4.10	5.10				Y
10	CENTRAL CONTRA COSTA SANITARY DISTRICT,	54.00	16.00	15.00	54.00			Y
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1,	23.66	7.50	13.10			Y	
13	CITY OF SAN DIEGO, CA						Y	
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER	117.75	3.53	17.69	23.57		Y	
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL	84.30	6.40	8.20	68.00		Y	
17	SANITATION DISTRICTS OF LOS ANGLES COUNT	14.30	1.33	4.70				
18	CITY OF COLORADO SPRINGS, CO	17.60	19.20	12.20	23.00		Y	
19	METRO DENVER SEWEAGE DISPOSAL DIST #	95.00	4.10	3.70			Y	
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	108.00	9.00	8.00			Y	
21	WATER & SEWER UTILITY ADMINISTRATION, DC							
22	CITY OF JACKSONVILLE, FL	224.70	10.95	10.30			Y	
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT.	76.02			2.34		Y	
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	0.00	35.00	31.00	21.90			Y
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	286.00	12.90	23.00	88.00	1.89		Y
27	DEPT OF SAN SEWERS, CITY OF TAMPA	51.70	4.00	7.20	7.20	6.73	Y	
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL,		20.60	20.60				Y
29	DIVISION OF WASTEWATER MGT, DPW, HONOLUL	95.00		6.70	0.00	0.00	Y	
31	MSD OF GREATER CHICAGO, IL	8.15	9.87	7.65				Y
32	SANITARY DISTRICT OF ROCKFORD, IL	28.83	5.59	30.26				Y
33	PUBLIC WORKS, INDIANAPOLIS IN	11.34	9.21	9.72	45.32	0.00	N	Y
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	47.00	4.50	3.00			Y	Y
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	89.00	15.30	6.10			Y	
36	SEWERAGE & WATER OF NEW ORLEANS, LA						Y	
37	CITY OF BALTIMORE, DPW, MD		5.12	7.61	30.36			Y
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES,							Y
41	UPPER BLACKSTONE WATER POLL. ABATEMENT D	90.00					Y	
44	DETROIT SEWER & WATER DEPT., MI	76.50	8.60	13.90	178.20	4.90	Y	
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	1.79			3.75			Y
48	METROPOLITAN WASTE CONTROL COMMISSION, M	83.00	3.60	7.20			Y	
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	50.80	7.10	41.00	0.00			Y
50	METRO ST. LOUIS SEWER DIST	35.00	22.50	4.50	53.69		Y	
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, N	53.87	7.91	7.12	0.99		Y	
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	1.80	13.00	9.00			Y	
54	BERGEN COUNTY UTILITES AUTHORITY, NJ							
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, N	22.84	5.67	3.07	18.03		Y	
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DI	120.00	3.00	5.00	3.77		Y	
60	BUFFALO SEWER AUTHORITY, NY		16.20	13.50				
64	IRONDEQUOIT PURE WATERS DISTRICT, NY							
68	MSD OF GREATER CINCINNATI, OH		10.50	6.60	16.00		Y	
69	NE OHIO REGIONAL SEWER DISTRICT, OH	1.10	4.80	8.40			Y	N
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRA	114.25	12.80	13.20			Y	N
71	CITY OF DAYTON, OH		3.57	2.45			Y	
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	124.00	7.30	3.00	32.00		Y	Y
73	CITY OF TULSA WATER & SEWER DEPT., OK	58.00	31.40	32.70			Y	
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON	77.70	4.10	8.30			N	Y
76	CITY OF PHILADELPHIA WATER DEPT	73.70	10.30	10.30			Y	

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RATES BY PARAMETER
SECTION C—QUESTIONS 6 & 7

ID	AGENCY NAME	FLOWS (CENTS/1000 GALS.)	BOD/COD (CENTS/LB.)	SS (CENTS/LB.)	OTHER (CENTS/LB.)	OTHER (CENTS/LB.)	DEBT RETIRE	O&M
78	NARRAGANSETT BAY COMMISSION							
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER S		6.52	6.90			Y	
81	CITY OF MEMPHIS, TN	58.68	2.70	4.60			Y	
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. T		4.00	4.42	4.42		N	Y
83	TRINITY RIVER AUTHORITY OF TEXAS	65.00	2.80	0.40	0.00	0.40		Y
84	DALLAS WATER UTILITIES, TX	0.58	0.31	0.33			Y	
85	EL PASO WATER UTILITES, TX	60.00	12.00	6.00			Y	
86	FORT WORTH WATER DEPT, TX	59.40	7.90	4.20			Y	
89	CITY OF SAN ANTONIO, WASTEWATER AGT DEPT	103.00	4.12	11.44			Y	
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT		5.20	0.82			N	
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE							
93	HAMPTON ROADS SANITATION DISTRICT, VA		13.65	14.55			Y	
94	MUNICIPALITY OF METRO. SEATTLE, WA		3.65	4.43				Y
95	CITY OF TACOMA SEWER UTILITY, WA	95.19	8.99	11.38	4.19		Y	
96	GREEN BAY MSD, WI	83.55	9.33	8.70	86.73		Y	
97	MADISON METROPOLITAN SEWERAGE DISTRICT,	23.34	7.24	7.98	36.52		Y	
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	16.15	8.52	8.26				Y
99	ENCINA WATER POLL. CONTROL FACILITY, CA	20.54	19.85	12.00				Y
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS	19.00	20.00	22.00			N	N
101	DOWNERS GROVE SAN DIST, IL	36.00	10.80	9.20				Y
102	SANITARY DISTRICT OF ELGIN, IL	62.00	10.40	11.70				Y
104	SPRINGFIELD SANITARY DISTRICT, IL	49.00	4.00	6.00			Y	
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	94.00	11.00	9.00			N	Y
109	PEPPER'S FERRY REG WASTEWATER TREATMENT						Y	
110	LITTLE BLUE VALLY SEWER DISTRICT, MO							

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RATES BY PARAMETER - II
SECTION C—QUESTIONS 8 & 9

ID	AGENCY NAME	RESIDENTIAL BILL USES PARAM RATE	EXPLAIN
1	JEFFERSON COUNTY PUBLIC WORKS, AL	N	VOLUME ONLY
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK		
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	Y	
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ	Y	
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	N	74.67/1000 GAL OR .56/100 CU.FT.
6	PINE BLUFF WASTEWATER UTILITY, AR	Y	
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	Y	
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	N	
9	CITY OF LOS ANGLE - DPW, CA	N	METERED WATER DELIVERED
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	Y	
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	Y	
13	CITY OF SAN DIEGO, CA	N	FLAT RATE ASSUMES 200PPM SS
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	Y	
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	Y	
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	N	ANNUAL BUDGET
18	CITY OF COLORADO SPRINGS, CO	Y	
19	METRO DENVER SEWERAGE DISPOSAL DIST #	Y	
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	Y	
21	WATER & SEWER UTILITY ADMINISTRATION, DC		TOTAL REVENUE = TOTAL EXPENDITURES
22	CITY OF JACKSONVILLE, FL	N	STANDARD RATES
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	Y	
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	N	FIXED SERV & CAP COSTS, VARIBLE TREAT CO
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	N	FLOW
27	DEPT OF SAN SEWERS, CITY OF TAMPA	N	BUDGET
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	N	O&M AND DEBT SERVICE
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI	Y	
31	MSD OF GREATER CHICAGO, IL	N	
32	SANITARY DISTRICT OF ROCKFORD, IL	N	BOD/TSS
33	PUBLIC WORKS, INDIANAPOLIS IN	Y	
34	DEPT OF WATER & POLL CONTROI, WICHITA KA	Y	
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	Y	
36	SEWERAGE & WATER OF NEW ORLEANS, LA		
37	CITY OF BALTIMORE, DPW, MD	Y	
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	N	FLOW
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA		
44	DETROIT SEWER & WATER DEPT., MI	Y	
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	N	N
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	Y	
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	Y	FLOW
50	METRO ST. LOUIS SEWER DIST	N	
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	Y	CHG INDUS FOR MONITORING
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	N	
54	BERGEN COUNTY UTILITES AUTHORITY, NJ		
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	Y	
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM	N	BY STRENGTH
60	BUFFALO SEWER AUTHORITY, NY	N	
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	Y	
68	MSD OF GREATER CINCINNATI, OH	Y	
69	NE OHIO REGIONAL SEWER DISTRICT, OH	Y	
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	N	109.36/1000 GALS
71	CITY OF DAYTON, OH	N	BY VOLUME,COSTS OF BUSINESS
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	N	INDUS RATES
73	CITY OF TULSA WATER & SEWER DEPT., OK	Y	
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR	N	FIXED COSTS & USER CHG
76	CITY OF PHILADELPHIA WATER DEPT	Y	

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RATES BY PARAMETER - II
SECTION C—QUESTIONS 8 & 9

ID	AGENCY NAME	RESIDENTIAL BILL USES PARAM RATE	EXPLAIN
78	NARRAGANSETT BAY COMMISSION		
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	Y	
81	CITY OF MEMPHIS, TN	Y	
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	Y	
83	TRINITY RIVER AUTHORITY OF TEXAS	N	EST O&M AND CAP NEEDS
84	DALLAS WATER UTILITIES, TX	N	BOD & TSS PER 250MG/L INCLUDES I/I
85	EL PASO WATER UTILITES, TX	Y	VOLUME
86	FORT WORTH WATER DEPT, TX	N	AVE STRENGTH
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	N	STRENGTH
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT	N	WINTER USAGE
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT		AVE MAR & APR METERS
93	HAMPTON ROADS SANITATION DISTRICT, VA	Y	
94	MUNICIPALITY OF METRO. SEATTLE, WA	N	VOLUME
95	CITY OF TACOMA SEWER UTILITY, WA	Y	FLOW
96	GREEN BAY MSD, WI	Y	
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	Y	
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	Y	
99	ENCINA WATER POLL. CONTROL FACILITY, CA	Y	
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	Y	
101	DOWNERS GROVE SAN DIST, IL	Y	
102	SANITARY DISTRICT OF ELGIN, IL	N	55CENTS/1000GAL
104	SPRINGFIELD SANITARY DISTRICT, IL	Y	EXCEPT HIGH STRENGTH & LARGE USER
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	N	
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	N	
110	LITTLE BLUE VALLY SEWER DISTRICT, MO		

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RATES BY PARAMETER - III
SECTION C—QUESTIONS 10 & 11

ID	AGENCY NAME	IND SUR	DESCRIBE	COSTS ALLOC TO PARAM	DESCRIBE
1	JEFFERSON COUNTY PUBLIC W	Y	PAY FOR BOD/SS OVER 300 PPM	N	
2	ANCHORAGE WATER & WASTEWA				
3	CITY OF PHOENIX WATER & W	N		Y	
4	PIMA COUNTY WASTEWATER MA	N	INDUC HAS HIGHER SET RATE FOR COD/SS	Y	FLOW: 45% COD:33% SS: 22%
5	CITY OF LITTLE ROCK WASTE	Y	ABOVE 300 MG/L FOR BOD & TSS	N	
6	PINE BLUFF WASTEWATER UTI	N		N	
7	CHINO BASIN MUNICIPAL WAT	Y	CHARGED BY MONITORED FLOW = TO MULITPLE OF	Y	THROUGH COMPUTATION OF EQUVILANT DWELLING
8	COUNTY SANITATION DISTRIC	Y	ACTUAL USAGE BY FLOW,SS, & BOD	Y	ALLOC BY DESIGN CHARACTERISTICS
9	CITY OF LOS ANGLE - DPW,	Y	SS ABOVE 250, BOD ABOVE 230	Y	BY METERED WATER AND QUALITY
10	CENTRAL CONTRA COSTA SANI	N		Y	FLOW 44% BOD 32% TSS 24%
11	EAST BAY MUNICIPAL UTILIT	Y	BASED ON WASTE STRENGTH ON DISCHARGE PERMT	Y	ALLOCATED ON FLOW,COD,TSS
13	CITY OF SAN DIEGO, CA			Y	FLOW AND SS
14	CITY & CTY OF SAN FRANCIS	Y	ADDITIONAL FOR TESTING	Y	GREASE & OIL
15	CITY OF SAN JOSE DEPT WAT	N		Y	BY TREATMENT PARAMETERS
17	SANITATION DISTRICTS OF L	Y	BASED ON COSTS TO OPERATE I.W. SECTION AND	Y	BY FLOW, COD, AND SS
18	CITY OF COLORADO SPRINGS,	Y	BOD OVER 282 MG/L TSS OVER 178 MG/L	N	
19	METRO DENVER SEWERAGE DISP	Y	AT INDUS RATES	N	
20	THE METROPOLITAN DISTRICT	Y	ACCORDING TO BOD/COD STRENGTH	N	
21	WATER & SEWER UTILITY ADM	N		N	
22	CITY OF JACKSONVILLE, FL	Y		N	
23	MIAMI-DADE WATER & SEWER	N		Y	PART OF RATE BY FLOW
24	ORANGE CTY PUB UTILITIES,	Y	BY RATE SCHEDULE	N	
26	ESCAMBIA CTY UTIL AUTH, P	Y	BOD,COD,SS, & FLOW	N	
27	DEPT OF SAN SEWERS, CITY	Y	VOLUME	N	
28	CITY OF ATLANTA-BUREAU OF			N	
29	DIVISION OF WASTEWATER MG	Y	SS >200 MG/L	Y	DISTRIBUTED ON BASIS OF FLOW
31	MSD OF GREATER CHICAGO, I	N		Y	FLOW, BOD, SS
32	SANITARY DISTRICT OF ROCK	N			BY FLOW AND BOD/TSS
33	PUBLIC WORKS, INDIANAPOLI	Y	BOD, TSS, NH3-N, MONITORING	N	
34	DEPT OF WATER & POLL CONT	N			
35	LOUISVILLE AND JEFFERSON	Y	BOD > 250 MG/L SS > 270 MG/L	Y	BY FLOW, CAP.,BOD, SS, ETC
36	SEWERAGE & WATER OF NEW O	Y	BOD> 350 MG/L, SS> 400 MG/L	Y	BY FLOW, BOD, SS
37	CITY OF BALTIMORE, DPW, M	Y	SS 300PPM BOD 300PPM P-12PPM	N	
38	ANNE ARUNDEL COUNTY, DEPT	Y	FLOW ABOVE 5000 GAL/MONTH	N	
41	UPPER BLACKSTONE WATER PO	N		N	
44	DETROIT SEWER & WATER DEP	Y		Y	COST OF SERVICE
47	WESTERN LAKE SUPERIOR SAN	N		Y	BOD AND SS
48	METROPOLITAN WASTE CONTRO	Y	OVER SS 250 MG/L,500 MG/L COD	Y	BASED ON FLOW
49	POLL. CONTROL DEPT., KANS	Y			
50	METRO ST. LOUIS SEWER DIS	Y	STRENGTH OF BOD & SS	Y	VOL, SS, BOD, SERV COST
51	CITY OF OMAHA - ENVIRONEM	Y	ON STRENGTH	Y	BY COST OF SERVICE
52	THE OCEAN COUNTY UTILITIE	Y		Y	BOD & SS OPS COST
54	BERGEN COUNTY UTILITES AU				
55	PASSAIC VALLEY SEWERAGE C	N		Y	BY DESIGN SEGMENT
57	PUBLIC WORKS DEPT., CUSTO	Y	BY STRENGTH	Y	BY FIXED COSTS
60	BUFFALO SEWER AUTHORITY,	Y		Y	
64	IRONDEQUOIT PURE WATERS D	Y	BY BOD, SS, CHLORINE CONTENT	N	
68	MSD OF GREATER CINCINNATI	Y	BOD,SS,TKN	N	
69	NE OHIO REGIONAL SEWER DI	Y	COD, BOD, SS	Y	59% FLOW, 15% BOD, 26% SS
70	CITY OF COLOMBUS, DIV. OF	Y	OVER 250 MG/L & 300MG/L PER LB	Y	
71	CITY OF DAYTON, OH	Y		Y	DIRECTLY BY VOLUME
72	CITY OF TOLEDO DEPT OF PU	Y	INDUS RATES	N	
73	CITY OF TULSA WATER & SEW	Y	BASED ON METER SIZE		

RPT11

RATES BY PARAMETER - III
SECTION C—QUESTIONS 10 & 11

ID	AGENCY NAME	IND SUR	DESCRIBE	COSTS ALLOC TO PARAM	DESCRIBE
74	UNIFIED SEWERAGE DISTRICT	N		N	N
76	CITY OF PHILADELPHIA WATE	Y	INDUS RATES	Y	ALLOCATED BY OTHER ITEMS
78	NARRAGANSETT BAY COMMISSI				
79	CITY OF CHATTANOOGA, INTE	Y	EXCESS BOD	Y	COST BY PLANT
81	CITY OF MEMPHIS, TN	Y	OVER 250 BOD MG/L 300 SS		
82	METRO GOV'T OF NASHVILLE/	N		Y	STRENGTH
83	TRINITY RIVER AUTHORITY O	Y	1.05/1000 GAL	N	
84	DALLAS WATER UTILITIES, T	Y	STRENGTH ABOVE 250MG/L BOD & TSS		
85	EL PASO WATER UTILITES, T	Y	BOD/SS OVER 300	Y	
86	FORT WORTH WATER DEPT, TX	Y	PER LB ABOVE RES. POLLUTION	Y	VOL, CAP, BOD, SS, MONITORING
89	CITY OF SAN ANTONIO, WAST	Y	STRENGTH	Y	VOLUME, TSS, BOD
90	SALT LAKE CITY DEPT. PUBL	Y	BOD OVER 200, SS OVER 250	N	
92	FAIRFAX CTY - DEPT PUB WO	N			
93	HAMPTON ROADS SANITATION	Y	BOD OVER 250, SS OVER 250	N	ALLOC OF TOTAL COSTS
94	MUNICIPALITY OF METRO. SE	Y	BOD/SS	Y	
95	CITY OF TACOMA SEWER UTIL	N		Y	HISTORICAL COSTS
96	GREEN BAY MSD, WI	N		N	
97	MADISON METROPOLITAN SEWE	Y	ACTUAL STRENGTH	Y	COST BASIS
98	MILWAUKEE METROPOLITAN SE	Y	WASTESTRENGTH	Y	OM ONLY BY EQUIP USE
99	ENCINA WATER POLL. CONTRO	N		Y	BOD, SS, FLOW
100	THORN CREEK BASIN SAN. DI	Y	BOD/SS	Y	
101	DOWNERS GROVE SAN DIST, I	Y	STRENGTH	Y	BOD, SS, FLOW
102	SANITARY DISTRICT OF FLGI	U	BOD > 200 MG/L SS > 250 MG/L		
104	SPRINGFIELD SANITARY DIST	Y	1 CENT/LB TSS & BOD 6.7 CENT/1000GAL	Y	ONLY FOR RATE INCREASES
107	CLACKAMAS COUNTY SERVICE	Y	FLOW PLUS EXCESS BOD/SS	Y	LABOR & MATERIALS COST
109	PEPPER'S FERRY REG WASTEW	N		Y	COST OF SERVICE
110	LITTLE BLUE VALLY SEWER D				

RPT12

BILLING & COLLECTIONS
SECTION D

ID #	ALL	COM/IND	CITY	OTHER	BILLINGS COMPUTERIZED	30-60	60-90	90-120	120-180	OVER-180	INT	FREQ
1				Y	Y							M
2	Y				Y							M
3	Y				Y						12.00	M
4				Y	Y		1.44	1.21	4.99		12.70	M
5	Y				Y				0.19	0.56		M
6				Y	Y	95.00	5.00					M
7			Y	Y	N							M
8		Y			Y	85.30	12.50	2.20			10.00	Q
9	Y				Y							M
10				Y	N						10.00	A
11	Y				Y	0.40	0.40	0.30				M
13	Y				Y	17.00	3.00	1.00	1.00			M
14			Y		Y							M
15				Y	Y							C
17				Y	Y	11.00	6.00	4.00	2.00	1.00	18.00	A
18	Y											M
19			Y		N					1.00	12.00	Q
20				Y	Y	13.00	7.50	8.00	4.50	28.00	5.00	M
21	Y				N							A
22												M
23	Y				Y	0.11	0.02	0.27			8.00	Q
24	Y				Y		2.60					M
26	Y				Y	12.00	3.50	30.00				M
27	Y				Y			0.40				M
28	Y				Y	29.00	11.00	7.00	53.00			M
29				Y	Y	1.00						
31		Y	Y	Y	N		0.80	4.00	2.00	2.80	9.00	A
32	Y					45.00	20.00	13.00	9.00	12.00		Q
33	Y				Y	8.00	51.00	19.00	12.00	10.00	10.00	M
34	Y			Y	Y						16.00	B
35	Y				Y						5.00	M
36	Y				Y							
37	Y				Y	80.00	5.00	5.00	5.00	5.00	18.00	O
38	Y				Y							Q
41			Y		Y	25.00	10.00	1.00	1.00		14.00	A
44			Y	Y	Y	16.00				38.00		A
47		Y	Y		Y	5.00					18.00	M
48		Y	Y		Y	5.00					6.00	M
49	Y				Y		8.30				18.00	M
50	Y				Y	4.00	9.00	4.00	6.00	12.00	15.00	S
51				Y	Y	2.80	0.90	1.00				M
52			Y		Y				4.00	31.00	8.00	C
54					N						8.00	Q
55				Y	Y		0.20				12.00	Q
57	Y				Y		0.98				18.00	M
60	Y				Y						12.00	A
64	Y				Y							A
68	Y				Y							Q
69				Y	Y							Q
70	Y				Y	0.21	0.12		1.22		10.00	M
71	Y	Y	Y		Y	0.50	0.30	0.10	2.30			M
72	Y				Y							O
73	Y				Y							P
74		Y	Y	Y	Y							A
76				Y	Y	29.70	25.30	22.00	45.30		9.50	Q

RPT12

BILLING & COLLECTIONS
SECTION D

ID #	ALL	COM/IND	CITY	OTHER	BILLINGS COMPUTERIZED	30-60	60-90	90-120	120-180	OVER-180	IMT	FREQ
78	Y				Y						12.00	S
79				Y	Y	1.00	1.00					S
81	Y				Y	0.75						M
82	Y		Y		Y	8.33	4.61	3.24	6.83			Q
83			Y		Y	5.00						M
84	Y		Y		Y	5.00	0.80	0.10	0.05	0.01		M
85	Y				Y	2.00	0.00			0.00		M
86	Y				Y	6.70						M
89			Y	Y	Y	95.00	2.00	1.00		2.00	120.00	M
90	Y				Y	20.55	10.37	5.58	3.72			M
92				Y	Y	11.00	5.00					Q
93	Y				Y							Q
94				Y	N						6.00	M
95	Y				Y	1.00	1.00	1.40			12.00	M
96			Y		Y	1.00						M
97			Y		N							Q
98			Y		Y						18.00	Q
99				Y	Y							M
100	Y				Y					4.00	10.00	Q
101	Y				Y						21.00	Q
102		Y		Y	Y	5.00					5.00	
104	Y	Y		Y	N							Q
107	Y				Y	3.50	4.00	36.00				Q
109			Y		Y						18.00	M
110												

PPT13

OTHER RATE INFORMATION
SECTION E

ID	AGENCY NAME	SEPARATED SEWER PERCENT	F1 SEPARATED CHARGE	COMBINED SEWER PERCENT	F1 COMBINED CHARGE	RESIDENTIAL SEPTIC CHARGE	COMMERCIAL SEPTIC CHARGE	I/I REDUCTION PROGRAM
1	JEFFERSON COUNTY PUBLIC WORKS, AL	95.00				Y	Y	N
2	ANCHORAGE WATER & WASTEWATER UTILITY					Y	Y	N
3	CITY OF PHOENIX WATER & WASTEWATER D	100.00				N	N	Y
4	PIMA COUNTY WASTEWATER MANAGEMENT DE	100.00				Y	Y	N
5	CITY OF LITTLE ROCK WASTEWATER UTILI	100.00		0.00		Y	Y	Y
6	PINE BLUFF WASTEWATER UTILITY, AR	100.00				Y	Y	Y
7	CHINO BASIN MUNICIPAL WATER DISTRICT	100.00				Y	Y	N
8	COUNTY SANITATION DISTRICTS OF ORANG	100.00				Y	Y	Y
9	CITY OF LOS ANGLE - DPW, CA	100.00				N	Y	Y
10	CENTRAL CONTRA COSTA SANITARY DISTRI	100.00				Y	Y	Y
11	EAST BAY MUNICIPAL UTILITY DISTRICT	100.00				N	Y	Y
13	CITY OF SAN DIEGO, CA	100.00				Y	Y	Y
14	CITY & CTY OF SAN FRANCISCO, CLEAN W			100.00			Y	Y
15	CITY OF SAN JOSE DEPT WATER POLL CON	100.00				Y	Y	N
17	SANITATION DISTRICTS OF LOS ANGLES C	100.00				Y	Y	N
18	CITY OF COLORADO SPRINGS, CO	100.00				Y	Y	Y
19	METRO DENVER SEWERAGE DISPOSAL DIST #	100.00				Y	Y	N
20	THE METROPOLITAN DISTRICT, HARTFORD,	80.00		20.00		Y	Y	Y
21	WATER & SEWER UTILITY ADMINISTRATION	96.00		4.00		N	N	Y
22	CITY OF JACKSONVILLE, FL	100.00				Y	Y	Y
23	MIAMI-DADE WATER & SEWER AUTHORITY D	90.00		10.00		Y	Y	Y
24	ORANGE CTY PUB UTILITIES, ORLANDO FL					N	Y	Y
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, F	100.00				Y	Y	Y
27	DEPT OF SAN SEWERS, CITY OF TAMPA	100.00				N	Y	Y
28	CITY OF ATLANTA-BUREAU OF POLL. CONT	95.00		5.00		Y	Y	Y
29	DIVISION OF WASTEWATER MGT, DPW, PON	100.00				N	N	N
31	MSD OF GREATER CHICAGO, IL	57.00		43.00		N	N	Y
32	SANITARY DISTRICT OF ROCKFORD, IL	98.00		2.00				Y
33	PUBLIC WORKS, INDIANAPOLIS IN	50.00		50.00	0.22	Y	Y	Y
34	DEPT OF WATER & POLL CONTROL, WICHIT	100.00				Y	N	Y
35	LOUISVILLE AND JEFFERSON COUNTY MSD,	60.00		40.00		Y	Y	Y
36	SEWERAGE & WATER OF NEW ORLEANS, LA	100.00				N	N	Y
37	CITY OF BALTIMORE, DPW, MD	100.00				Y	Y	Y
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITI	100.00				N	Y	Y
41	UPPER BLACKSTONE WATER POIL. ABATEME			65.00		Y	Y	N
44	DETROIT SEWER & WATER DEPT., MI			98.00		Y	Y	N
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	100.00				Y	Y	Y
48	METROPOLITAN WASTE CONTROL COMMISSIO	75.00		25.00		Y	Y	Y
49	POLL. CONTROL DEPT., KANSAS CITY, MO							Y
50	METRO ST. LOUIS SEWER DIST	79.00		21.00		N	N	Y
51	CITY OF OMAHA - ENVIRONMENTAL SERVICE	62.00		38.00		Y	Y	Y
52	THE OCEAN COUNTY UTILITIES AUTHORITY	100.00				Y	Y	N
54	BERGEN COUNTY UTILITES AUTHORITY, NJ					Y		N
55	PASSAIC VALLEY SEWERAGE COMMISSIONER	43.00		57.00		N	N	Y
57	PUBLIC WORKS DEPT., CUSTOMER SERVICE	100.00				Y	Y	Y
60	BUFFALO SEWER AUTHORITY, NY							
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	100.00						N
68	MSD OF GREATER CINCINNATI, OH					Y	Y	Y
69	NE OHIO REGIONAL SEWER DISTRICT, OH	74.00		26.00		N	N	Y
70	CITY OF COLUMBUS, DIV. OF SEWERAGE &	75.00		25.00		Y	Y	Y
71	CITY OF DAYTON, OH	100.00				N	N	N
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	78.00		22.00		Y	Y	Y
73	CITY OF TULSA WATER & SEWER DEPT., O					Y	Y	

RPT13

OTHER RATE INFORMATION
SECTION E

ID	AGENCY NAME	SEPARATED SEWER PERCENT	F1 SEPARATED CHARGE	COMBINED SEWER PERCENT	F1 COMBINED CHARGE	RESIDENTIAL SEPTIC CHARGE	COMMERCIAL SEPTIC CHARGE	I/I REDUCTION PROGRAM
74	UNIFIED SEWERAGE DISTRICT OF WASHING	100.00				Y	Y	Y
76	CITY OF PHILADELPHIA WATER DEPT	50.00	11.99	50.00	11.99	Y	Y	Y
78	NARRAGANSETT BAY COMMISSION	60.00		40.00		N	N	N
79	CITY OF CHATTANOOGA, INTERCEPTOR SEW	82.00		18.00		Y	Y	Y
81	CITY OF MEMPHIS, TN	100.00				Y	Y	Y
82	METRO GOV'T OF NASHVILLE/DAVIDSON CT					Y	Y	Y
83	TRINITY RIVER AUTHORITY OF TEXAS	100.00				Y	Y	Y
84	DALLAS WATER UTILITIES, TX	100.00		0.00		Y	Y	Y
85	EL PASO WATER UTILITES, TX	100.00				Y	Y	Y
86	FORT WORTH WATER DEPT, TX	100.00				N	N	Y
89	CITY OF SAN ANTONIO, WASTEWATER MGT	100.00				N	N	Y
90	SALT LAKE CITY DEPT. PUBLIC UTILITES					N	N	Y
92	FAIRFAX CTY - DEPT PUB WORKS - OFF W					N	N	Y
93	HAMPTON ROADS SANITATION DISTRICT, V	100.00				Y	Y	Y
94	MUNICIPALITY OF METRO. SEATTLE, WA	85.00		15.00		Y	Y	N
95	CITY OF TACOMA SEWER UTILITY, WA	100.00				Y	Y	Y
96	GREEN BAY MSD, WI	100.00				N	N	Y
97	MADISON METROPOLITAN SEWERAGE DISTRI	100.00				Y	Y	Y
98	MILWAUKEE METROPOLITAN SEWERAGE DIST	88.00	26.96	12.00	26.96	Y	N	Y
99	ENCINA WATER POLL. CONTROL FACILITY,	100.00				Y	Y	Y
100	THORN CREEK BASIN SAN. DIST.,CHICAGO	100.00				N	N	Y
101	DOWNERS GROVE SAN DIST, IL	100.00				N	N	Y
102	SANITARY DISTRICT OF ELGIN, IL					N	N	N
104	SPRINGFIELD SANITARY DISTRICT, IL	60.00	1.00	40.00	1.00	Y	Y	Y
107	CLACKAMAS COUNTY SERVICE DISTRICT #1	100.00				N	N	N
109	PEPPER'S FERRY REG WASTEWATER TREATM	95.00		5.00		Y	Y	Y
110	LITTLE BLUE VALLY SEWER DISTRICT, MO							

RPT14

CAPITAL COST RECOVERY
SECTION F

ID	AGENCY NAME	92-500 PROGRAM	CURRENT COSTS (1985 $)	EST GRANT %	FINANCING PERIOD(YEARS)	1985 LOCALLY FUNDED PATRON
1	JEFFERSON COUNTY PUBLIC WORKS, AL	N				
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK	Y	42,573,790	84.00		
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	N				
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ	N				
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	Y	9,100,000			
6	PINE BLUFF WASTEWATER UTILITY, AR	Y	10,000,000		30.00	
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	N				
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	N				
9	CITY OF LOS ANGLE - DPW, CA	Y	528,000,000	60.00		6547000
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	Y	6,366,000	87.50		
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	Y	231,000,000			
13	CITY OF SAN DIEGO, CA	N				
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	Y	83,240,000	23.00	23.00	
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	Y	20,961,900	20.90	20.00	
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	Y	140,000,000	95.00		
18	CITY OF COLORADO SPRINGS, CO	N				
19	METRO DENVER SEWERAGE DISPOSAL DIST #	Y	21,670,667	0.00	20.00	
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	N				
21	WATER & SEWER UTILITY ADMINISTRATION, DC	Y	10,192,100	75.00	20.00	
22	CITY OF JACKSONVILLE, FL	Y	3,295,401	54.20	30.00	
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	Y	11,807,000	42.00	20.00	
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	Y	89,400,000	57.00		
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	N				
27	DEPT OF SAN SEWERS, CITY OF TAMPA	Y	15,900,000	50.30	32.00	
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	Y	220,000,000	70.00	20.00	
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI					
31	MSD OF GREATER CHICAGO, IL	Y				
32	SANITARY DISTRICT OF ROCKFORD, IL	N				
33	PUBLIC WORKS, INDIANAPOLIS IN	Y				
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	Y	800,000	55.00	10.00	
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	Y	87,500,000	49.00	30.00	
36	SEWERAGE & WATER OF NEW ORLEANS, LA	N				
37	CITY OF BALTIMORE, DPW, MD	Y	40,000,000	87.50	20.00	5000000
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	Y	31,600,000	72.00		
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA	N				
44	DETROIT SEWEL & WATER DEPT., MI	Y	29,208,278	55.00	25.00	
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	N				
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	Y	85,000,000	50.00	20.00	
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	Y	10,000,000	60.00	20.00	
50	METRO ST. LOUIS SEWER DIST	Y	171,794,000	60.00	20.00	
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	Y	42,000,000	87.50	20.00	
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	Y	3,200,000	70.00	30.00	
54	BERGEN COUNTY UTILITES AUTHORITY, NJ	Y	60,000,000			
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	Y				
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NE	Y	15,000,000	30.00		
60	BUFFALO SEWER AUTHORITY, NY	N				
64	IRONDEQUOIT PURE WATERS DISTRICT, NY	N				
68	MSD OF GREATER CINCINNATI, OH	Y	40,400,000	55.00	20.00	
69	NE OHIO REGIONAL SEWER DISTRICT, OH	Y	30,478,000	64.00	20.00	
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	Y	167,000,000			
71	CITY OF DAYTON, OH	Y	60,000,000			
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	Y	1,500,000	75.00	20.00	
73	CITY OF TULSA WATER & SEWER DEPT., OK					
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR	Y	6,000,000	0.00		

RPT14

CAPITAL COST RECOVERY
SECTION F

ID	AGENCY NAME	92-500 PROGRAM	CURRENT COSTS (1985 $)	EST GRANT %	FINANCING PERIOD(YEARS)	1985 LOCALLY FUNDED PATRON
76	CITY OF PHILADELPHIA WATER DEPT	Y		75.00		
78	NARRAGANSETT BAY COMMISSION	Y	200,000,000			
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	Y	500,000	0.00		
81	CITY OF MEMPHIS, TN	N				
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	Y	15,000,000		30.00	
83	TRINITY RIVER AUTHORITY OF TEXAS	N				
84	DALLAS WATER UTILITIES, TX	Y	223,600,000			
85	EL PASO WATER UTILITES, TX	Y	36,000,000	30.00		
86	FORT WORTH WATER DEPT, TX	Y	150,750,000	20.00		
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	Y	470,000,000	14.00	20.00	
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT	N				
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT					
93	HAMPTON ROADS SANITATION DISTRICT, VA	Y	85,000,000	55.00		
94	MUNICIPALITY OF METRO. SEATTLE, WA	Y	650,180	44.00	30.00	
95	CITY OF TACOMA SEWER UTILITY, WA	Y	85,000,000	75.00		
96	GREEN BAY MSD, WI	Y	700,000	75.00	1.00	
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	Y	50,000,000	64.00	20.00	3645534
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	Y	1,697,200,075	60.00	21.00	
99	ENCINA WATER POLL. CONTROL FACILITY, CA	N				
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	Y	11,900,000	69.00	15.00	
101	DOWNERS GROVE SAN DIST, IL	Y	25,000,000	75.00		
102	SANITARY DISTRICT OF ELGIN, IL	Y	9,385,000	75.00		
104	SPRINGFIELD SANITARY DISTRICT, IL	N				
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	N				
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	Y	2,000,000	75.00	25.00	
110	LITTLE BLUE VALLY SEWER DISTRICT, MO					

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GENERAL INFO.
WHOLESALERS REPORT
SECTION G—QUESTIONS 1, 2, 4 & 5

ID	AGENCY NAME	CUSTOMERS SERVED	SEWERAGE METER	WATER METER	CONNECTION	EQUIVALENT FACTOR	OTHER	MONITORING FREQUENCY (DAYS)	BILLING FREQUENCY
1	JEFFERSON COUNTY PUBLIC WORKS,								
2	ANCHORAGE WATER & WASTEWATER UT	2	2					30	M
3	CITY OF PHOENIX WATER & WASTEWA	5	100					2	M
4	PIMA COUNTY WASTEWATER MANAGEME								
5	CITY OF LITTLE ROCK WASTEWATER								
6	PINE BLUFF WASTEWATER UTILITY,								
7	CHINO BASIN MUNICIPAL WATER DIS	9	3			6		4	Q
8	COUNTY SANITATION DISTRICTS OF								
9	CITY OF LOS ANGLE - DPW, CA								
10	CENTRAL CONTRA COSTA SANITARY D	1	1					365	S
11	EAST BAY MUNICIPAL UTILITY DIST								
13	CITY OF SAN DIEGO, CA	11	11						Q
14	CITY & CTY OF SAN FRANCISCO, CL								
15	CITY OF SAN JOSE DEPT WATER POL	8							Q
17	SANITATION DISTRICTS OF LOS ANG								
18	CITY OF COLORADO SPRINGS, CO	3	100						M
19	METRO DENVER SEWERAGE DISPOSAL D	44	40			4		80	Q
20	THE METROPOLITAN DISTRICT, HART	12		4			8	1	Q
21	WATER & SEWER UTILITY ADMINISTR	7	5	5			5		A
22	CITY OF JACKSONVILLE, FL								
23	MIAMI-DADE WATER & SEWER AUTHOR	11	11						M
24	ORANGE CTY PUB UTILITIES, ORLAN								
26	ESCAMBIA CTY UTIL AUTH, PENSACO								
27	DEPT OF SAN SEWERS, CITY OF TAM	2	2					6	M
28	CITY OF ATLANTA-BUREAU OF POLL.	6	2				4	30	M
29	DIVISION OF WASTEWATER MGT, DPW								
31	MSD OF GREATER CHICAGO, IL								
32	SANITARY DISTRICT OF ROCKFORD,								
33	PUBLIC WORKS, INDIANAPOLIS IN	6	6					30	M
34	DEPT OF WATER & POLL CONTROL, W								
35	LOUISVILLE AND JEFFERSON COUNTY								
36	SEWERAGE & WATER OF NEW ORLEANS	******							
37	CITY OF BALTIMORE, DPW, MD								
38	ANNE ARUNDEL COUNTY, DEPT OF UT								
41	UPPER BLACKSTONE WATER POLL. AB	6	6					1	A
44	DETROIT SEWER & WATER DEPT., MI	22	22						M
47	WESTERN LAKE SUPERIOR SAN. DIST	11	8		3				M
48	METROPOLITAN WASTE CONTROL COMM	105	98		2	5		30	M
49	POLL. CONTROL DEPT., KANSAS CIT								
50	METRO ST. LOUIS SEWER DIST								
51	CITY OF OMAHA - ENVIRONMENTAL SE	6	4	2				30	M
52	THE OCEAN COUNTY UTILITIES AUTH	37	37						Q
54	BERGEN COUNTY UTILITES AUTHORIT	43	43						Q
55	PASSAIC VALLEY SEWERAGE COMMISS	30	66	1	137			90	Q
57	PUBLIC WORKS DEPT., CUSTOMER SE	1	1	1				1	M
60	BUFFALO SEWER AUTHORITY, NY							365	A
64	IRONDEQUOIT PURE WATERS DISTRIC								
68	MSD OF GREATER CINCINNATI, OH								
69	NE OHIO REGIONAL SEWER DISTRICT	2		100					Q
70	CITY OF COLOMBUS, DIV. OF SEWER								
71	CITY OF DAYTON, OH	6	1	5			1		M
72	CITY OF TOLEDO DEPT OF PUB UTIL								

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GENERAL INFO.
WHOLESALERS REPORT
SECTION G—QUESTIONS 1, 2, 4 & 5

ID	AGENCY NAME	CUSTOMERS SERVED	SEWERAGE METER	WATER METER	CONNECTION	EQUIVALENT FACTOR	OTHER	MONITORING FREQUENCY (DAYS)	BILLING FREQUENCY
73	CITY OF TULSA WATER & SEWER DEP								
74	UNIFIED SEWERAGE DISTPICT OF WA	15				15			Q
76	CITY OF PHILADELPHIA WATER DEPT	10	10					6	Q
78	NARRAGANSETT BAY COMMISSION								
79	CITY OF CHATTANOOGA, INTERCEPTO	3		100					M
81	CITY OF MEMPHIS, TN	22,900						30	M
82	METRO GOV'T OF NASHVILLE/DAVIDS	4	3	1				30	M
83	TRINITY RIVER AUTHORITY OF TEXA		16		2				M
84	DALLAS WATER UTILITIES, TX								
85	EL PASO WATER UTILITES, TX								
86	FORT WORTH WATER DEPT, TX	21	11	10				90	M
89	CITY OF SAN ANTONIO, WASTEWATER	18	1	17				30	M
90	SALT LAKE CITY DEPT. PUBLIC UTI								
92	FAIRFAX CTY - DEPT PUB WORKS -								
93	HAMPTON ROADS SANITATION DISTRI								
94	MUNICIPALITY OF METRO. SEATTLE,	37							M
95	CITY OF TACOMA SEWER UTILITY, W								
96	GREEN BAY MSD, WI	10	15					30	M
97	MADISON METROPOLITAN SEWERAGE D	44	37	1		6		7	Q
98	MILWAUKEE METROPOLITAN SEWERAGE	26		17	26	9		90	Q
99	ENCINA WATER POLL. CONTPOL FACI	6	5			1		7	Q
100	THORN CREEK BASIN SAN. DIST.,CH								
101	DOWNERS GROVE SAN DIST, IL								
102	SANITARY DISTRICT OF ELGIN, IL	1	1					30	M
104	SPRINGFIELD SANITARY DISTRICT,								
107	CLACKAMAS COUNTY SERVICE DISTRI	3	2			1		30	M
109	PEPPER'S FERRY REG WASTEWATER T	6	5	1				30	M
110	LITTLE BLUE VALLY SEWER DISTRIC	11	11						Q

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GENERAL INFO.
WHOLESALERS REPORT
LOAD MEASUREMENT OF CUSTOMERS
SECTION G—QUESTIONS 3, 6 & 7

ID	AGENCY NAME	WASTEWATER	ESTIMATED CONCENTRATIONS	OTHER	INDIVIDUAL CUSTOMERS BILLED?	1985 COSTS FOR MONITORING AND BILLING
1	JEFFERSON COUNTY PUBLIC WORKS, AL					
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK	2			Y	
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	ALL			N	66,880.00
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ					
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR					
6	PINE BLUFF WASTEWATER UTILITY, AR					
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	Y			N	
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA					
9	CITY OF LOS ANGLE - DPW, CA				Y	
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	1	2		N	
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA					
13	CITY OF SAN DIEGO, CA	11			Y	
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA					
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	8	8		N	
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA					
18	CITY OF COLORADO SPRINGS, CO	Y			Y	
19	METRO DENVER SEWERAGE DISPOSAL DIST #	40	4		N	450,000.00
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	Y	Y		N	200,000.00
21	WATER & SEWER UTILITY ADMINISTRATION, DC				N	
22	CITY OF JACKSONVILLE, FL					
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL				N	
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA					
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.					
27	DEPT OF SAN SEWERS, CITY OF TAMPA	Y			Y	970,950.00
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA		6		Y	3,566,800.00
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI					
31	MSD OF GREATER CHICAGO, IL					
32	SANITARY DISTRICT OF ROCKFORD, IL					
33	PUBLIC WORKS, INDIANAPOLIS IN	Y			Y	1,395,221.00
34	DEPT OF WATER & POLL CONTROL, WICHITA KA					
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY					
36	SEWERAGE & WATER OF NEW ORLEANS, LA					
37	CITY OF BALTIMORE, DPW, MD					
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD					
41	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA				N	
44	DETROIT SEWER & WATER DEPT., MI	Y			N	1,780,484.00
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	8	3		N	
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	Y			N	
49	POLL. CONTROL DEPT., KANSAS CITY, MO.					
50	METRO ST. LOUIS SEWER DIST					
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	6			Y	19,300.00
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	37			N	
54	BERGEN COUNTY UTILITES AUTHORITY, NJ	43			N	
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	Y			N	200,500.00
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM	1			N	
60	BUFFALO SEWER AUTHORITY, NY	11			N	
64	IRONDEQUOIT PURE WATERS DISTRICT, NY					
68	MSD OF GREATER CINCINNATI, OH					
69	NE OHIO REGIONAL SEWER DISTRICT, OH				Y	100.00
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH					
71	CITY OF DAYTON, OH				N	
72	CITY OF TOLEDO DEPT OF PUB UTILITIES					

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GENERAL INFO.
WHOLESALERS REPORT
LOAD MEASUREMENT OF CUSTOMERS

SECTION G—QUESTIONS 3, 6 & 7

ID	AGENCY NAME	WASTEWATER	ESTIMATED CONCENTRATIONS	OTHER	INDIVIDUAL CUSTOMERS BILLED?	1985 COSTS FOR MONITORING AND BILLING
73	CITY OF TULSA WATER & SEWER DEPT., OK					
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR				N	
76	CITY OF PHILADELPHIA WATER DEPT	10			Y	
78	NARRAGANSETT BAY COMMISSION					
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	3			Y	234,695.00
81	CITY OF MEMPHIS, TN	Y	Y		Y	312,000.00
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	Y			Y	
83	TRINITY RIVER AUTHORITY OF TEXAS	16			N	
84	DALLAS WATER UTILITIES, TX					
85	EL PASO WATER UTILITES, TX					
86	FORT WORTH WATER DEPT, TX	Y			N	1,300,000.00
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	18			N	1,600,000.00
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT					
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT					
93	HAMPTON ROADS SANITATION DISTRICT, VA					
94	MUNICIPALITY OF METRO. SEATTLE, WA			HIGH	N	93,595.00
95	CITY OF TACOMA SEWER UTILITY, WA					
96	GREEN BAY MSD, WI	10			N	
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	37	7		N	104,276.00
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI				N	650,000.00
99	ENCINA WATER POLL. CONTROL FACILITY, CA	6			N	
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL					
101	DOWNERS GROVE SAN DIST, IL					
102	SANITARY DISTRICT OF ELGIN, IL	1			Y	
104	SPRINGFIELD SANITARY DISTRICT, IL					
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	3			N	
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	5	1		N	
110	LITTLE BLUE VALLY SEWER DISTRICT, MO	11				

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GENERAL INFO.
WHOLESALERS ONLY
SECTION G—QUESTIONS 8, 9 & 10

ID	AGENCY NAME	VOLUME CENT/1000 GAL	BOD CENT/LB.	SS CENT/LB.	PHOS CENT/LB.	N CENT/LB.	FATS,OIL GREASE CENT/LB.	CUST CHARGE $/UNIT	OTHER	IF SURCHG VOLUME WASTEWATER BELOW LIM	LOCAL ADMIN CHG/YR
1	JEFFERSON COUNTY PUB										
2	ANCHORAGE WATER & WA										
3	CITY OF PHOENIX WATE	4.95	4.31	2.38							
4	PIMA COUNTY WASTEWAT										
5	CITY OF LITTLE ROCK										
6	PINE BLUFF WASTEWATE										
7	CHINO BASIN MUNICIPA								2.37	0.32	
8	COUNTY SANITATION DI										
9	CITY OF LOS ANGLE -										
10	CENTRAL CONTRA COSTA										
11	EAST BAY MUNICIPAL U										
13	CITY OF SAN DIEGO, C	0.44									
14	CITY & CTY OF SAN FR										
15	CITY OF SAN JOSE DEP	0.27	0.06	0.06					0.70		
17	SANITATION DISTRICTS										
18	CITY OF COLORADO SPR	0.24	0.11	0.11				83.95		0.66	
19	METRO DENVER SEWEAGE	0.17	0.09	0.07							
20	THE METROPOLITAN DIS	03.60	0.08	0.06						1.08	
21	WATER & SEWER UTILIT										
22	CITY OF JACKSONVILLE										
23	MIAMI-DADE WATER & S	0.44							2.34		
24	ORANGE CTY PUB UTILI										
26	ESCAMBIA CTY UTIL AU										
27	DEPT OF SAN SEWERS,	0.69	0.03	0.07	0.07	0.07		9.46		0.56	
28	CITY OF ATLANTA-BURF									1.60	
29	DIVISION OF WASTEWAT										
31	MSD OF GREATER CHICA										
32	SANITARY DISTRICT OF										
33	PUBLIC WORKS, INDIAN	0.16	0.09	0.10		0.45		24.36		*******	
34	DEPT OF WATER & POLL										
35	LOUISVILLE AND JEFFE										
36	SEWERAGE & WATER OF										
37	CITY OF BALTIMORE, D										
38	ANNE ARUNDEL COUNTY,										
41	UPPER BLACKSTONE WAT	0.23									
44	DETROIT SEWER & WATE	0.77	0.10	0.14	2.00		0.05			0.77	
47	WESTERN LAKE SUPERIO	0.14	0.17	0.16	1.37						
48	METROPOLITAN WASTE C	0.83		0.07					0.04	0.83	28.00
49	POLL. CONTROL DEPT.,										
50	METRO ST. LOUIS SEWE										
51	CITY OF OMAHA - ENVI	0.18	0.04	0.05			0.01			0.47	
52	THE OCEAN COUNTY UTI	1.60	0.13	0.08						1.80	
54	BERGEN COUNTY UTILIT	0.29	0.07	0.09					0.30		
55	PASSAIC VALLEY SEWER	0.19	0.05	0.02							
57	PUBLIC WORKS DEPT.,			0.05					0.03		
60	BUFFALO SEWER AUTHOR		12.00	12.00							
64	IROQUOIS PURE WAT										
68	MSD OF GREATER CINCI										
69	NE OHIO REGIONAL SEW	0.77	0.12	0.07							
70	CITY OF COLOMBUS, DI										
71	CITY OF DAYTON, OH										

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GENERAL INFO.
WHOLESALERS ONLY
SECTION G—QUESTIONS 8, 9 & 10

ID	AGENCY NAME	VOLUME CENT/1000 GAL	POD CENT/LB.	SS CENT/LB.	PHOS CENT/LB.	N CENT/LB.	FATS,OIL GREASE CENT/LB.	CUST CHARGE $/UNIT	OTHER	IF SURCHG VOLUME WASTEWATER BELOW LIM	LOCAL ADMIN CHG/YR
72	CITY OF TOLEDO DEPT										
73	CITY OF TULSA WATER										
74	UNIFIED SEWERAGE DIS										0.50
76	CITY OF PHILADELPHIA	1.90	0.06	0.07				107.20		0.50	
78	NARRAGANSETT BAY COM										
79	CITY OF CHATTANOOGA,	1.85	0.06	0.09					12.73	2.24	
81	CITY OF MEMPHIS, TN	0.59	2.70	4.60				9.00		0.59	
82	METRO GOV'T OF NASHV										
83	TRINITY RIVER AUTHOR								0.64		
84	DALLAS WATER UTILITI										
85	EL PASO WATER UTILIT										
86	FORT WORTH WATER DEP		0.08	0.05				46.20			
89	CITY OF SAN ANTONIO,	0.52	0.06	0.02						0.92	
90	SALT LAKE CITY DEPT.										
92	FAIRFAX CTY - DEPT P										
93	HAMPTON ROADS SANITA										
94	MUNICIPALITY OF METR		0.29	0.04				70.00			
95	CITY OF TACOMA SEWER										
96	GREEN BAY MSD, WI	0.36	0.09	0.07	0.72						
97	MADISON METROPOLITAN	0.15	0.07	0.07		0.34		17.62			20.00
98	MILWAUKEE METROPOLIT	16.15	8.52	8.26							35.00
99	ENCINA WATER POLL. C	0.10	0.12	0.05					0.09		
100	THORN CREEK BASIN SA										
101	DOWNERS GROVE SAN DI										
102	SANITARY DISTRICT OF	35.00	9.00	9.60						35.00	
104	SPRINGFIELD SANITARY										
107	CLACKAMAS COUNTY SER	0.46									
109	PEPPER'S FERRY REG W										
110	LITTLE BLUE VALLY SE										

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COMPARISONS BY
RESIDENTIAL POPULATION SERVED

ID	AGENCY NAME	POPULATION	TREATMENT COST MGD	O&M & DEBT SERV	O&M ONLY	A-10 LEVEL OF SERVICE
	RESORTED IN ORDER OF POPULATION SIZE	A-3	B-4	C-3		
109	PEPPER'S FERRY REG WASTEWATER TREATMENT AUTH, VA	35,000	585.00	180.00	60.00	SECONDARY
107	CLACKAMAS COUNTY SERVICE DISTRICT #1, OR	36,200	747.14	116.40	84.00	SECONDARY
38	ANNE ARUNDEL COUNTY, DEPT OF UTILITIES, MD	60,263	2811.90		110.00	MIXED
6	PINE BLUFF WASTEWATER UTILITY, AR	61,000	456.62	6.00	5.60	SECONDARY
101	DOWNERS GROVE SAN DIST, IL	62,000	479.21	129.36	86.40	TERTIARY
100	THORN CREEK BASIN SAN. DIST.,CHICAGO HTS. IL	85,000	487.85	101.00	80.00	TERTIARY
26	ESCAMBIA CTY UTIL AUTH, PENSACOLA, FLA.	95,000	1291.28	13.88	9.15	MIXED
47	WESTERN LAKE SUPERIOR SAN. DIST. MN	97,000	547.18		15.36	SECONDARY
24	ORANGE CTY PUB UTILITIES, ORLANDO FLA	100,000	1591.19	357.84	203.97	MIXED
102	SANITARY DISTRICT OF ELGIN, IL	102,500	428.04	45.50	38.50	MIXED
68	IRONDEQUOIT PURE WATERS DISTRICT, NY	126,193	59.86	43.55	33.00	MIXED
104	SPRINGFIELD SANITARY DISTRICT, IL	130,000	209.13	70.00	43.00	TERTIARY
96	GREEN BAY MSD, WI	145,115	650.02	30.24	13.44	SECONDARY
5	CITY OF LITTLE ROCK WASTEWATER UTILITY, AR	165,000	422.02		87.36	SECONDARY
99	ENCINA WATER POLL. CONTROL FACILITY, CA	175,000	608.72		120.00	MIXED
2	ANCHORAGE WATER & WASTEWATER UTILITY, AK	188,673	1054.74	187.20	132.48	MIXED
79	CITY OF CHATTANOOGA, INTERCEPTOR SEWER SYSTEM, TN	194,000	430.88	135.72	28.68	SECONDARY
95	CITY OF TACOMA SEWER UTILITY, WA	200,000	850.82	112.01	94.46	PRIMARY
32	SANITARY DISTRICT OF ROCKFORD, IL	200,000	527.99	69.96	63.52	SECONDARY
78	NARRAGANSETT BAY COMMISSION	210,000	439.21	50.00	39.50	SECONDARY
97	MADISON METROPOLITAN SEWERAGE DISTRICT, WI	250,000	328.77	84.00	54.00	TERTIARY
110	LITTLE BLUE VALLY SEWER DISTRICT, MO	260,000	170.88			SECONDARY
81	UPPER BLACKSTONE WATER POLL. ABATEMENT DIST., MA	261,000	201.47	88.21	84.00	SECONDARY
74	UNIFIED SEWERAGE DISTRICT OF WASHINGTON COUNTY, OR	275,000	1059.36	150.60	129.00	MIXED
34	DEPT OF WATER & POLL CONTROL, WICHITA KA	303,070	170.78		45.00	MIXED
18	CITY OF COLORADO SPRINGS, CO	310,000	1020.47	131.00	118.00	MIXED
22	CITY OF JACKSONVILLE, FL	320,732	966.90	254.40	150.10	SECONDARY
71	CITY OF DAYTON, OH	330,000	116.37	66.32	56.37	SECONDARY
27	DEPT OF SAN SEWERS, CITY OF TAMPA	331,230	1043.06	148.80	102.33	MIXED
82	METRO GOV'T OF NASHVILLE/DAVIDSON CTY. TN	341,415	318.00			MIXED
20	THE METROPOLITAN DISTRICT, HARTFORD, CT	352,000	544.09	176.40	140.00	SECONDARY
10	CENTRAL CONTRA COSTA SANITARY DISTRICT, CA	357,000	690.00	165.00	124.00	SECONDARY
90	SALT LAKE CITY DEPT. PUBLIC UTILITES, UT	375,000	346.62	66.20	32.83	SECONDARY
73	CITY OF TULSA WATER & SEWER DEPT., OK	376,500	508.42	65.92	54.98	SECONDARY
52	THE OCEAN COUNTY UTILITIES AUTHORITY, NJ	390,000				SECONDARY
7	CHINO BASIN MUNICIPAL WATER DISTRICT, CA	394,000	428.34	63.00	43.50	MIXED
57	PUBLIC WORKS DEPT., CUSTOMER SERVICES DIV.,NM	400,000	112.62	112.75	55.27	MIXED
35	LOUISVILLE AND JEFFERSON COUNTY MSD, KY	450,000	691.58	101.00	78.00	
72	CITY OF TOLEDO DEPT OF PUB UTILITIES	454,000	377.22	109.08	82.40	SECONDARY
51	CITY OF OMAHA - ENVIRONMENTAL SERVICES, NE	474,673	517.99	91.49	71.66	SECONDARY
54	BERGEN COUNTY UTILITES AUTHORITY, NJ	476,000	626.55	95.00	68.00	SECONDARY
1	JEFFERSON COUNTY PUBLIC WORKS, AL	500,000	287.02		100.00	SECONDARY
85	EL PASO WATER UTILITES, TX	500,000	302.86		83.04	MIXED
60	BUFFALO SEWER AUTHORITY, NY	500,000		140.59	108.50	SECONDARY
49	POLL. CONTROL DEPT., KANSAS CITY, MO.	530,000	309.59	57.60	43.20	MIXED
36	SEWERAGE & WATER OF NEW ORLEANS, LA	556,913	643.71	195.72	129.17	SECONDARY
4	PIMA COUNTY WASTEWATER MANAGEMENT DEPT., AZ	600,000	913.54	69.01	67.28	MIXED
11	EAST BAY MUNICIPAL UTILITY DISTRICT #1, CA	600,000	664.38	67.56	54.49	MIXED
29	DIVISION OF WASTEWATER MGT, DPW, HONOLULU HI	635,000	727.01	160.00	113.00	MIXED
92	FAIRFAX CTY - DEPT PUB WORKS - OFF WASTE MGT	670,200	504.90		161.60	
86	FORT WORTH WATER DEPT, TX	694,500	245.27			TERTIARY
83	TRINITY RIVER AUTHORITY OF TEXAS	700,000	367.52		76.20	TERTIARY

RPT 18

COMPARISONS BY RESIDENTIAL POPULATION SERVED

ID	AGENCY NAME	POPULATION	TREATMENT COST MGD	O&M & DEBT SERV	O&M ONLY	A-10 LEVEL OF SERVICE
	RESORTED IN ORDER OF POPULATION SIZE	A-3	B-4	C-3		
14	CITY & CTY OF SAN FRANCISCO, CLEAN WATER AUTH., CA	719,000	1103.79	102.00	58.00	MIXED
33	PUBLIC WORKS, INDIANAPOLIS IN	771,800	551.37	95.52	78.00	MIXED
70	CITY OF COLOMBUS, DIV. OF SEWERAGE & DRAINAGE, OH	800,000	547.51	112.86	72.96	SECONDARY
81	CITY OF MEMPHIS, TN	850,000	322.70	56.64	33.00	SECONDARY
68	MSD OF GREATER CINCINNATI, OH	864,000	588.57	116.44	83.44	MIXED
13	CITY OF SAN DIEGO, CA	978,900	878.81		96.00	PRIMARY
98	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI	991,500	576.33	290.60	68.60	SECONDARY
3	CITY OF PHOENIX WATER & WASTEWATER DEPT., AZ	1,000,000	315.04	46.10	27.75	SECONDARY
94	MUNICIPALITY OF METRO. SEATTLE, WA	1,000,000	1034.00	129.00	123.00	MIXED
84	DALLAS WATER UTILITIES, TX	1,030,914	515.00	101.52	76.14	TERTIARY
93	HAMPTON ROADS SANITATION DISTRICT, VA	1,057,387	615.33	72.00	50.40	MIXED
15	CITY OF SAN JOSE DEPT WATER POLL CONTROL, CA	1,100,000	567.66	124.80	107.81	MIXED
89	CITY OF SAN ANTONIO, WASTEWATER MGT DEPT, TX	1,100,000	501.95	136.19	77.63	SECONDARY
50	METRO ST. LOUIS SEWER DIST	1,100,000	313.70	55.40	47.40	MIXED
55	PASSAIC VALLEY SEWERAGE COMMISSIONERS, NJ	1,200,000	474.62			SECONDARY
19	METRO DENVER SEWEAGE DISPOSAL DIST #	1,200,000	314.67	95.00	68.00	SECONDARY
23	MIAMI-DADE WATER & SEWER AUTHORITY DEPT., FL	1,218,000	375.65	116.04	85.40	MIXED
69	NE OHIO REGIONAL SEWER DISTRICT, OH	1,400,000	397.38	94.20	69.08	MIXED
28	CITY OF ATLANTA-BUREAU OF POLL. CONTROL, GA	1,560,000	242.90	173.00	151.00	MIXED
76	CITY OF PHILADELPHIA WATER DEPT	1,688,210	433.60	196.32	110.28	SECONDARY
37	CITY OF BALTIMORE, DPW, MD	1,700,000	419.67	158.00	143.37	MIXED
48	METROPOLITAN WASTE CONTROL COMMISSION, MN	1,850,000	557.70	82.35	59.66	MIXED
8	COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CA	2,000,000	233.52	46.09	44.90	MIXED
21	WATER & SEWER UTILITY ADMINISTRATION, DC	2,000,000	312.29		142.00	TERTIARY
44	DETROIT SEWER & WATER DEPT., MI	3,000,000	417.45	123.56	90.20	SECONDARY
9	CITY OF LOS ANGLE - DPW, CA	3,500,000	221.60	62.40	23.10	SECONDARY
17	SANITATION DISTRICTS OF LOS ANGLES COUNTY, CA	4,430,093	282.80		34.00	MIXED
31	MSD OF GREATER CHICAGO, IL	5,100,000	273.49	40.00	20.00	MIXED

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